Perceptions and Experiences of Organisational Stress within Elite Football Academy Environments

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Perceptions and Experiences of Organisational Stress within Elite Football Academy Environments

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Abstract of the thesis

The Elite Player Performance Plan (EPPP) was implemented within elite English football club academies in 2012 to provide optimum environments to develop better home-grown players. However, there has been conflicting evidence of the EPPP's success and limited research examining the influence of the EPPP. Sports performers and coaches face a wide range of environmental stressors which have often been overlooked when examining behaviour within elite sporting environments. Further understanding of organisational stress within football academies is required so it can be applied into a football academy setting to help provide optimum environments for well-being, performance, and development. Therefore, the aim of this thesis was to examine organisational stress upon adolescent players and coaches within elite academy football environments.

A mixed methods approach was undertaken in three sequential studies. Study 1 interviewed elite adolescent players (*n* = 36) and coaches (*n* = 15) to identify perceptions of organisational stressors encountered within the youth development phase of elite academies. Data were analysed using thematic analysis. Players' stressors were pressures and expectations, development and opportunities, balancing act, interaction and communication with significant academy others, and performing as a football player. Novel lower-order themes were identified as balancing football and friendships/other interests/school and having a familiar home match environment. The findings highlighted the importance of life outside of football. Coaches' stressors were football clubs' organisational changes, job role and responsibility changes and the impact of these job changes on coaches' lives. Novel lower-order themes were identified as EPPP audit demands, working at home, coaching standards, and increased accountability. Category 2 and 3 coaches reported increased working hours and reduced autonomy as additional negative demands.

To identify the experiences of organisational stress within the youth development phase of elite academies, organisational stressors, appraisals, and emotions of adolescent players (*n* = 30) were studied over three phases of a season in Study 2. Data were collected using a structured diary method that collected both qualitative and quantitative data (adapted from Reeves et al., 2011) and analysed using content analysis, descriptive and inferential statistics. Players'

stressors were school education, academy football, school football, external interests, and daily living. Perceived stressor control was seen as fairly controllable, yet no significant effects of time on stressor control was found ($p = 0.10$). Players cited players' actions, other people's actions, aspects of academy football, aspects of school, doing activities, part of the daily living routine, and external factors as causes of stressors. Players' prominent emotions were sadness-depression, happiness-joy and anger. Emotions were perceived as a fairly strong intensity and time did have a significant effect on emotion intensity ($p = 0.01$). A small-scale study of coaches ($n = 11$) revealed findings to support the importance of job role and responsibilities and life outside of football.

Adolescent players ($n = 16$) completed standardised psychometric tests (Organisational Stressor Indicator for Sports Performers, Arnold et al., 2013; Sport Emotion Questionnaire, Jones et al., 2005; Rest and Recovery Questionnaire-52, Kellmann & Kallus, 2001) in Study 3 to identify the organisational stressors and their situational properties, emotions, and recovery-stress within the youth development phase of elite academies over a season. Data were analysed using inferential statistics. Findings revealed organisational stressors were rare, hardly intense and occurred for a short time, emotions were felt a little and recovery-stress was low to medium. There was a significant influence of time on some situational properties of organisational stressors (team and culture intensity, $p = 0.013$ and duration, $p = 0.019$; selection frequency, $p = 0.025$), emotions (dejection, $p = 0.004$; happiness, $p = 0.015$; excitement, $p = 0.007$), and recovery-stress aspects (fitness/being in shape, $p = 0.012$; burnout/personal accomplishment, $p = 0.003$; sport-specific recovery, $p = 0.006$; global recovery, $p = 0.007$). The findings highlighted the importance of time of the season influencing some components of the stress process.

This programme of research provides a greater understanding of organisational stress upon players and coaches within academy football since the introduction of the EPPP and pinpointed areas of theory for future consideration. The findings presented in this thesis can be incorporated in football applied practice to address the prevalence of organisational stressors in football academies guided by the EPPP. It is recommended that appropriate measurement tools are developed purposely for youth elite athletes and coaches in this area.

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Acknowledgements

From choosing which subject to study at university to teaching at a university and within a football club, it has been a long journey towards reaching my goal of being a PhD student. I feel at home within education and now I can finally say I have submitted a PhD thesis.

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Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the University Ethics Committee on 11/05/2016, 22/07/2017, and 20/05/2018.

I declare that the Word Count of this Thesis is 75,190 words

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Chapter One

INTRODUCTION

Within association football, a decade of contextual research of the performance environment has not yet elucidated key aspects of development environments in elite youth football (cf. Mills et al., 2014). Talent development environments in English football have however received increasing attention (Gledhill et al., 2017). Preliminary research (e.g., Mills et al., 2014; Mitchell et al., 2018) has attempted to reveal the factors (such as psychosocial architecture, organisational function, the physical environment, support network and long-term development) that underpin optimal environments for elite academy football players but failed to consider the organisational demands that may affect football development. Since performance and well-being are influenced by the sporting environment, the development of a talented athlete in this environment would be also (Mill et al., 2014). Indeed, the term talent development implied that young players are supported with a suitable learning environment to achieve their potential (Williams & Reilly, 2000). For example, key stakeholders (e.g., coaches, peers, parents) and environmental factors (e.g., culture) are considered to play a pivotal role in player development (Mills et al., 2012; Richardson et al., 2004); yet it is the specific environment at a football academy that can be the most directly controllable factor conducive to improving development (Mills et al., 2014).

The pressure to produce professional football players has dramatically increased over the recent years due to the escalating transfer fees demanded by top players and the investment of approximately £40 million into English football academies (Reeves et al., 2009). Nevertheless, the CIES Football Observatory survey (2014) found that in matches up to 21st October 2014, Premier League (PL) clubs have fielded a record low number of home-grown players. These survey figures do not equate directly to the number of English players fielded by the clubs due to the home-grown definition including overseas player who have trained for three years at an English club in their youth. Further investigation by the CIES found that out of the “big five” football leagues, The Premier League has the lowest proportion of home-grown players who were English (77%) while the world champions Germany have 96% home grown players eligible to play for their country, as opposed to 93% in France, 92% in Spain and 79% in Italy. Moreover,

The Premier League is fourth out of the “big five” leagues when developing home grown players through the academy system, behind France’s Ligue 1 (24.6%), Spain’s La Liga (22.4%) and Germany’s Bundesliga (16.4%), with Serie A in Italy fielding a lower proportion (9.6%).

Consequently, developing youth into elite football players continues to be an important topic for professional clubs and governing bodies to address (Mills et al., 2014). Attempts have been made, for example, The FA launched the Future Game, a technical guide for young player development, which outlines a philosophy and vision for the development of young English footballers. The guide was driven by the need to address the belief that at the highest-level English players have fallen behind their global counterparts and England lack a clear vision for the future development of elite youth players (The FA, 2014). Support of this belief has been provided by the England national team not winning an international competition since the World Cup in 1966. Regarding The Premier League, the increase in quality and buying power of elite clubs has led to a scenario where successful English young footballers not only have to be the best players in England but also the world (Mills et al., 2014). As a result, attempts to modernise youth development in England, clubs in the Premier League, representatives of the Football League, the FA and other key stakeholders have developed a vision centred on the ambition to enable English football to create the world’s leading Academy System and provide an optimum environment to develop better home-grown players (The Premier League, 2011). This vision produced was named the Elite Player Performance Plan (EPPP) implemented nationwide from 2012.

1.1 THE ELITE PLAYER PERFORMANCE PLAN

The EPPP details the processes and criteria necessary to provide more and better home-grown players and increase the efficiency of youth development investment (The Premier League, 2011). This new approach has six fundamental principles: increase the number of home grown players gaining professional contracts in the clubs and playing first team football at the highest level; create more time for players to play and be coached; improve coaching provision;

implement a system of effective measurement and quality assurance; positively influence strategic investment into the Academy system (demonstrating value for money); and seek to implement significant gains in every aspect of player development (The Premier League, 2011). These principles will be achieved by focusing on four areas, coaching, classification, compensation and education. Each Academy will be audited objectively by the Independent Standards Organisation recommended by the Lewis Report (2007) which focuses on different factors within these areas and then be given a Category Status of 1 to 4. Category one is the most elite status which is the optimum development environment for players in the youth system that produces PL players, provides the highest quality of coaching and development; down to category four that provides intensive full training from U17 to U21 and will produce late developing players for the Football League (FL) and occasionally the PL. As a result, the higher a club's status, the more funding will be available from the PL and FA.

The successful implementation of the plan will create an elite training environment where players have the required time and space to develop supported by outstanding coaches in every phase of the Performance Pathway; where each phase of development will be challenging, developmental and inspirational; and the coaching programme will be supported by Education, Sports Science and Medicine and Games programmes. Furthermore, the environment will incorporate a multidisciplinary approach that delivers the Four Corner Model and develop educationally rounded graduates who are independent decision makers on and off the football field. It is a challenge to create such characteristics in an elite environment, however if this challenge is met various benefits will result (The Premier League, 2011). These benefits aim to address the FA's and PL's vision to consistently outperform international competition in the production of world-class home-grown players; as well as enabling English clubs to be the best in the world. In addition, benefits also include creating an academy system that continually improves, sustains access and positively contributes to the clubs' business plans.

Surveys have suggested that the EPPP has produced an 11% increase in English player appearances during the 2014-2015 season up until October (see Conn, 2014). A Premier League spokesman has commented that the "…programme of investment is already working," (Conn, 2014. p.10). Although,

there is confusion between these findings and the CIES Football Observatory survey, with the overall figure for home grown players falling across the “big five” leagues from 20.2% in 2010 to 17.2%. In consideration of both statistics, it is clear the supply of English soccer talent is still weak (cf. Slot, 2007) with only a small percentage of players making the transition from the academy to professional players (cf. Taylor & Bruner, 2012).

The Talent Identification and Development System (TIDS) of football academies have been criticised (e.g., Calvin, 2018; Conn, 2017a, 2017b) for not providing adequate support for players under the EPPP (Rongen et al., 2018). With some academies requiring players to be released from school to train this can impede educational attainment and the mental ill-health of ex-academy players questions whether the EPPP supports the holistic development of young players (Rongen et al., 2018). Furthermore, there has been limited research examining the influence of the EPPP. The literature that exists focuses on the influence of EPPP on the physical aspects of players. For example, Noon et al. (2015) examined high training loads on perceptions of well-being and physical performance of players. Findings suggested that elite youth football players have decreasing perceptions of well-being and neuromuscular performance yet increasing endurance performance as a season progresses. Therefore, it is essential to contribute to the significant gap in research relating to the investigation of the influence of the organisational environment created by the EPPP within football academies.

1.2 ADOLESCENT ATHLETES

There has been growing attention to growth and development during adolescence (Steinberg & Morris, 2001). For example, Keating (1980) summarised the cognitive development in adolescence as emphasising the world of possibility; the ability to carry out hypothesis testing and scientific reasoning; thinking about the future by planning; capable of introspection or meta-cognition; and the expansion of thinking to include the external world as well as personal issues. Specifically, development research has found the improvement of short-term memory advances as children grow with age (e.g., Schneider & Pressley, 1997);

and the speed of retrieving information (processing) from long-term memory improves as children get older (e.g., Keating & Bobbitt, 1978). As well as cognitive development, as children enter adolescence, the primary influence of the parent decreases and peers become increasingly influential alongside social comparison and conformity into adolescence (Wiese-Bjornstal et al., 2009). Furthermore, the biological processes drive many aspects of this growth and development, with the onset of puberty. Puberty is a transitional period during which secondary sexual characteristics appear, fertility is achieved, and a growth spurt occurs, with the normal range of onset between ages 9 to 15 in males (Kipke, 1999). The dramatic physical and contextual changes combined with cognitive and social developments that characterise adolescence make this an ideal period to examine the demands experienced (Collins et al., 2000).

One important insight from adolescent literature in the past two decades is the influence of settings on adolescents' development and behaviour (Kipke, 1999). Schooling, career and peer group are all examples of stressors experienced by adolescents (Compas et al., 2001). However, from this organisational perspective, far less is known about adolescent athletes compared to adult athletes (Greenleaf et al., 2001). Given the importance of the adolescent years for sporting development, the limited research in this area needs rectifying (Reeves et al., 2009). Elite adolescent team sport is under-represented within sport psychology literature (Pain & Harwood, 2007; Reeves et al., 2009).

In football academy environments the process of developing players is broken down into three distinct phases: the foundation phase (U5-U11), the youth development phase (U12-U16) and the professional development phase (U17-U21; The Premier League, 2011). Due to the introduction of the EPPP, coaching, the games programme, sports science and medicine, and education are presented differently in terms of the three phases. In recognition of the EPPP emphasising bespoke age specific solutions to each phase of a player's development it is assumed that each phase will also provide a different organisational environment for players and coaches. An understanding of the organisational environment at each specific phase in elite youth football is needed.

Outside sport, there has been a longer recognition of the important roles of social, contextual, experiential, emotional, psychological, and environmental

factors in human behaviour, function, and achievement. However, within early sport psychology studies they have often neglected this interplay focusing too narrowly on athletes' performance state at the time of performance (Douglas & Carless, 2006) and on the individual athlete (Pain & Harwood, 2007). Previous studies have detailed a set of hypothesized explanations for optimal sport performance which include physical and psychosocial factors such as training, coaching, support, and mental skills (for example, Bangsbo et al., 2006; Thelwell et al., 2006). However, it is acknowledged that general behaviour is influenced and cannot be separated from contextual influences (Law et al., 1996). The tendency has been to overlook the broader organisational context and dynamics which play a pivotal role in preparing and developing athletes (Fletcher & Wagstaff, 2009). Later studies have acknowledged this issue and taken a holistic approach when examining sport performers within their elite sport environment.

Seminal studies in this area were first undertaken by Gould and colleagues (Gould et al., 2002a; Gould et al., 2002b; Gould et al., 1999; Greenleaf et al., 2001) who investigated positive and negative factors within the competitive environment of Olympians. This series of studies identified positive factors influencing performance of mental preparation, peer and family support but also negative factors of planning, team cohesion, coach issues and lack of focus. Marked differences also appeared between teams that exceeded performance expectations (resident programmes, family and friend support, and mental preparation) and teams that failed to meet expectations (coach issues, lack of team cohesion and experience). The impact of social and organisational factors is clearly evidence that falls in line with organisational stress literature (Pain & Harwood, 2007).

Weiss and Bredemeier (1983) have suggested that a developmental theoretical approach is important when studying psychosocial experiences of children in sport. As such, the theory will provide a greater understanding of behaviour by focusing on changes in cognitive abilities when explaining behaviour among individuals. Age groups should be selected based on underlying cognitive developmental criteria when researching children. Specifically, within sport psychology literature adolescence has been compartmentalised into three periods

based on chronological age: early (12-14 years), middle (15-18 years), and late (19-21 years; Weiss & Bredemeier, 1983).

Therefore, the research programme will examine adolescent football players from the youth development phase of the academy structure, particularly with players within the U14's to U16's teams. As a result, the players will be aged between 13 to 16 years old. In line with the adolescence age perimeters set in the glossary, only the youth and professional development phases involve adolescent players. Furthermore, the influence of growth and organisational settings such as puberty and school, are more prominent in the youth development phase rather than the professional development phase, as players become full-time professional football scholars. Chronological age in terms of players team age (e.g., U16's) was selected to classify participants in preference to grouping adolescent periods, or other measures such as maturation, due to football academies also grouping their players using this method. The ages from the U14's to U16's was chosen in the youth development phase as a consequence of the removal of the U12's group not being classified as adolescents. In addition to the removal of the U13's group for practical reasons such as possible transition to school day release, as well as taking into consideration vast improvements in cognitive development from 13 years onwards (e.g., Conklin et al., 2007; Luciana et al., 2005).

1.3 COACHES' EXPERIENCES

There has been an increase in research dedicated to the organisation's influence on sports coaches over the past decade (e.g., Frey, 2007; Levy et al., 2009; Olusoga et al., 2009; Thelwell et al., 2008). Given the multiple roles associated with coaching in sports such as designing athlete training programmes, dealing with athlete and parental concerns (Miller et al., 2002), managing administrative duties and technical aspects of athletic performance (Fletcher & Scott, 2010); Thelwell et al. (2010) have argued that coaches should be regarded as performers in their own right. The combination of such tasks alongside the pressure to perform (Gould et al., 2002b); it is not surprising attention is turned to exploring coaches' experiences and its effect on their job performance and

personal well-being (Fletcher & Scott, 2010). Despite the initial research exploring organisational influences and their impact upon sports coaches, experiences of elite level coaches within a single sport is limited. Furthermore, whilst research continues to focus on the players experiences and successful development within a football academy (e.g., Mills et al., 2014; Reeves et al., 2009), at present little is known about what factors influence academy coaches' experiences within the organisational setting (Dixon & Tuner, 2018). Therefore, in line with the adolescent sample and the assumption that each performance pathway phase will provide a different organisational environment for coaches, the research programme will examine academy football coaches from the youth development phase.

Recent research has also qualitatively explored organisational stress experiences of volunteer, part-time and full-time male and female UK sports coaches from various levels and sports (Potts et al., 2018). Findings highlighted the differences between coaches operating on different employment bases (e.g., full-time coaches experience more coach-related stressors). Therefore, to reduce individual difference variables within academy football coaches, only full-time male football coaches from the youth development phase will be sampled. This is in keeping with previous organisational stress research who recruited high level, full-time coaches (e.g., Olusoga et al., 2012).

1.4 PURPOSE OF THE THESIS

The purpose of this thesis is to examine the influence of elite football academy environments upon its coaches and adolescent players since the introduction of the EPPP. Specifically, the thesis aims to examine organisational stress upon adolescent players and coaches within elite academy environments. The thesis will be split into three studies, whose specific aims are to:

AIM 1: To interpret the adolescent players' and coaches' perceptions of football academy status 1-3 environments within the youth development phase since the introduction of the EPPP.

AIM 2: To explore the adolescent players' and coaches' organisational stress experiences (stressors, appraisals, emotions) of football academy status environments within the youth development phase across a season.

AIM 3: To explore adolescent players' situational properties of organisational stressors, emotion and recovery-stress of football academy status environments within the youth development phase across a season.

The thesis will extend current literature by using a mixed method approach to provide an in-depth understanding of the organisational influence within football academies (see Figure 1). Once a deeper understanding of football academy environments has been obtained among adolescent players and coaches it can develop directions for future research and practice. Particularly, in line with the EPPP's aim, recommendations could be made to enhance the optimal environment for talent development in the form of performance and organisational change and by providing appropriate levels of support to its players and coaches.

1.5 DESIGN AND OVERVIEW OF THE THESIS

In order to achieve these aims, the research was designed in three sequential phases:

1. Phase 1 consisted of semi-structured interviews with no a priori knowledge to interpret the adolescent players' and coaches' perceptions of football academy status 1-3 environments within the youth development phase since the introduction of the EPPP qualitatively.

2. Phase 2 consisted of a specifically designed diary with qualitative and quantitative components to explore the adolescent players' and coaches' experiences (i.e., stressors, appraisal and emotions) of the football academy environments within the youth development phase across a season prospectively.

3. Phase 3 consisted of three specific psychometrics to explore adolescent players' situational properties of organisational stressors, emotions, and

recovery-stress of football academy environments within the youth development phase across a season quantitatively.

1.6 STRUCTURE OF THE THESIS

The thesis comprises seven chapters, within which this introduction, a literature review, three studies, a summary, discussion, and conclusion are presented (see Figure 1). The specific outline of the thesis is as follows:

Chapter Two presents a review of the literature surrounding the concepts, definitions, and theories of the organisational perspective in sport. Within this presentation, a synthesis of the studies that are pertinent to investigating the organisational stressors and performance environment factors encountered by sport coaches and performers are highlighted. Literary issues and methodological limitations are discussed which provide a springboard for the subsequent studies.

Chapter Three presents an overview of the philosophy and methodology underpinning the thesis. This will provide a further rationale for the inclusion of certain methodologies in order to address the aims of the thesis.

Chapter Four (Study 1 A & B) reports and discusses the findings of an exploration into the stressors of category status 1-3 football academies among youth development phase players and coaches.

Chapter Five (Study 2) focuses on a prospective longitudinal investigation which develops further the exploration of specific aspects identified in Study 1 (stressors of football academies) alongside other organisational stress components (appraisal and emotion) among youth development phase players using qualitative and quantitative diary methodology. A sub-section considering the stressors, appraisals and emotions among academy coaches across a season is also included.

Chapter Six (Study 3) focuses on a prospective longitudinal investigation which investigates additional components of the stress process by building upon the findings presented in Study 1 and 2, as well as corroborating previous findings using different more applicable methodology in sport. The chapter will identify the

situational properties of stressors within football academies alongside other organisational stress components (emotion and response regarding recovery-stress) among youth development phase players using quantitative standardised inventories.

Chapter Seven summaries the findings of the thesis and then presents a discussion and overall conclusion.

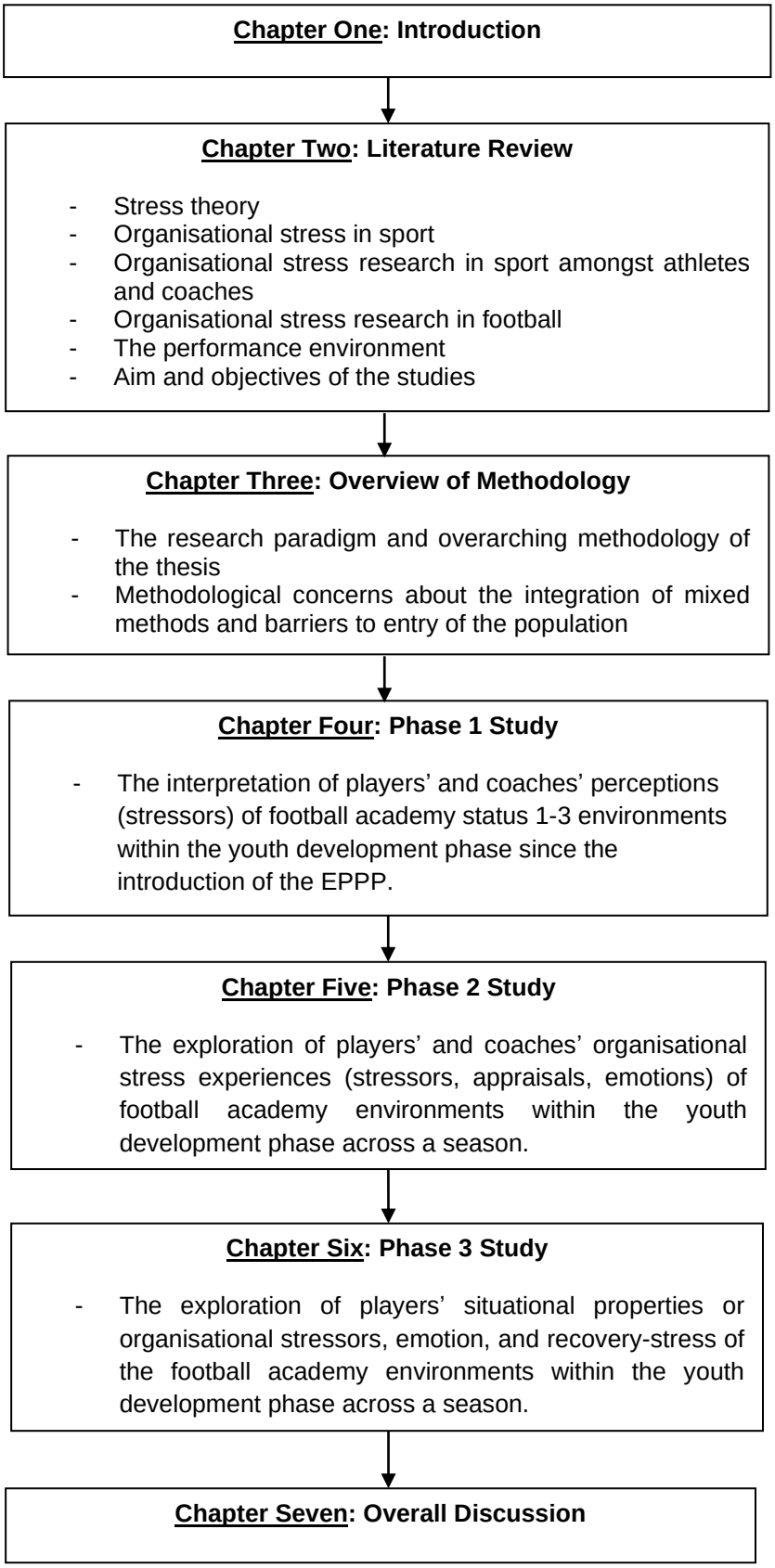


Figure 1. Structure of the thesis

Chapter Two

LITERATURE REVIEW

Identifying environmental demands influencing behaviour and sport performance can be discussed using the terms organisational stress and performance environment. Organisational stress is a continuous transaction between the environmental demands associated within the operating organisation and the individual (Fletcher et al., 2006). The role of stress is a factor contributing to this organisational perspective. The performance environment is the temporally and organisationally related factors impacting performance in competitive situations (Pain & Harwood, 2008). Identifying and understanding these demands have become an important area in sport psychology research (Thatcher & Day, 2008).

This literature review is presented in two parts. Part one will provide a general review of the concepts, theories and research related to organisational stress. Part two will provide a review of the organisation's impact in sport from a performance environment perspective.

2.1 PART ONE: CONCEPTS, THEORIES AND RESEARCH RELATED TO ORGANISATIONAL STRESS IN SPORT

2.1.1 Stress theory

Many theoretical perspectives of stress have been portrayed within the literature with Lazarus' (1999; Lazarus & Folkman, 1984) stress model the most widely adopted in sport (Mellalieu et al., 2009; Nicholls & Polman, 2007). It is a dynamic process that involves individuals interacting with the environment, making appraisals and efforts to cope with the situation (Porter & Stone, 1996). During events individuals will primarily appraise the situation in relation to their beliefs. If the situation has been appraised as threatening, challenging, harmful or beneficial, the individual is required to cope (Lazarus, 1999). Coping is the changing cognitive and behavioural efforts to manage specific demands appraised as exceeding the resources of the person (Lazarus & Folkman, 1984). The individual will secondarily

appraise their coping options (e.g., problem-focused, emotion-focused and avoidance) to manage the situation (Lazarus, 1999).

2.1.1.1 Stress as a transaction

In accordance with Lazarus' (1966) conceptualisation of stress, central to the organisational stress process is the individual's cognitive appraisal of the situation within the work environment. For operational reasons many researchers underpin their work with a stimulus-based model of stress (Arnold & Fletcher, 2012a) that focuses on environmental demands, referred to as stressors, impinging on individuals' functioning (Hinkle, 1973; Mason, 1975). In response to the lack of theoretically driven stress research Fletcher et al. (2006) and Hanton et al. (2005) have advocated a transactional approach in stress source research. This transactional perspective is the mostly widely adopted model (Nicholls & Polman, 2007). The transactional approach is a dynamic process that examines individuals transacting with the environment, making appraisals of the situation, and attempting to cope with the situation. There are three features of the transactional approach to stress (Fletcher et al., 2006): the ongoing process, the dynamic and cognitive state and the recursive principle. First, stress is seen as an ongoing process of the individual transacting with their environment, making appraisals of stressors, and attempting to cope (Cooper et al., 2011); stress is also conceptualised as a dynamic and cognitive state in which an individual restores a homeostatic balance (Dewe et al., 1993); and the environment, the individual and their reaction can have a mutual effect on each (Fletcher et al., 2006).

2.1.1.2 Stress as a relational meaning

The notion that environmental demands and personal characteristics generate cognitive-evaluative reactions and that individuals ascribe meaning to each stressor is a central part of the organisational stress process (Lazarus, 1998, 1999). To further theory on the transactional approach, Fletcher et al. (2006) advocated that research should consider the concept of relational meaning. Relational meaning understands why individuals differ in their thoughts, emotions and actions despite sharing the same social groups and environmental stimulus (Lazarus, 1999). Persons differ in goals, beliefs and resources due to the interaction of different biological origins and developmental experiences (Lazarus,

1999). Dewe et al. (2010) went onto suggest that the relational meaning is depicted by appraisals e.g., one individual may appraise a stressor as exceeding resources whereas another may be able to cope with the same stressor.

2.1.2 Clarification of organisational stress concepts

Fletcher et al. (2006) supported further developing stress research in which greater clarity towards the stress-related construct is necessary in order to provide researchers with consistent definitions of key terms involved. Specifically, distinctions need to be made between stressors (environmental demands encountered by an individual) and strain (negative responses to stressors). It is important to pinpoint the definitions and descriptions chosen to underpin this programme of research when discussing organisational stress. Organisational stress resides neither in the individual nor the work environment but rather in the individual's appraisal of the situation within the work environment (Lazarus, 1966). In accordance with the transactional approach to stress, the definitions of organisational stress, organisational stressors, and organisational strain adopted are presented in the Glossary section. An essential distinction to be made is the term stress and organisational stress represents the overall process incorporating stressors, strains, appraisals and coping responses (Fletcher & Scott, 2010).

2.1.2.1 Stressors

Stressors are not to be confused with stress as stressors are the environmental demands experienced by an individual (Fletcher et al., 2006). Organisational stressors are the first stage in the transactional conceptualisation of stress (Lazarus & Launier, 1978), which are mediated by the process of perception, appraisal, and coping resulting in positive or negative responses, feelings and outcomes (Fletcher et al., 2006). Examining specific forms of stress or sources of stress specific to the population studied focuses on particular characteristics of the stressor itself (Schwarzer & Taubert, 2002). According to the transactional approach it is not the stressor itself that leads to a stressful appraisal but the individual's appraisal of the stressor relevant to their well-being (Lazarus & Folkman, 1984). Therefore Lazarus (1999) suggested that rather than identifying stressors and what they are about, identifying the rules that make an individual appraise a stressor as stressful would be more appropriate e.g., the underlying

properties of stressors. Taking into consideration relational meaning, Lazarus and Folkman (1984) proposed eight underlying situational properties for a stressful evaluation of a stressor. These are: 1) novelty, which are situations the individual has not previously experienced; 2) predictability, which are when established expectancies are no longer met; 3) event uncertainty, which is the likelihood of an event occurring; 4) imminence, which is the period of time before an event occurs; 5) duration, which is the length of the event; 6) temporal uncertainty, which is when the individual knows that an event will happen but not when; 7) ambiguity, which is when the appraisal information is unavailable or insufficient; and 8) timing of events in relation to the life cycle, which are when events occur at the same time as other stressful events in the individual's life cycle.

2.1.2.2 Appraisal

From a transactional perspective, appraisals are evaluations that are influenced by beliefs, values and/or goals of an individual (cf. Lazarus & Folkman, 1984). It involves evaluating the relevance and meaning of a stressor ascribed to by the person and its significance for well-being (Hanton et al., 2012). Lazarus (1966) identified two kinds of appraisal: primary and secondary appraisal. Primary appraisal represents an evaluation about whether a situation is relevant or significant to the individual's beliefs, values, goal commitments, and situational intentions (Lazarus, 1999). According to Lazarus and Folkman (1984) there are three types of primary appraisal: irrelevant appraisals occur when situations are evaluated as not threatening or harmful; benign-positive appraisals occur when situations are evaluated as potential to enhance well-being; and stressful appraisals occur when situations are evaluated as a stressful i.e., when the relationship between the individual and the environment is seen as endangering their well-being or exceeding their resources (Lazarus & Folkman, 1984). There are four different types of stressful appraisal that can be made: harm/loss, threat, challenge, and benefit. Harm/loss appraisals take place when damage to an individual has already occurred, threat appraisals occur when harms and losses are anticipated in the future, challenge appraisals refers to when a person anticipates a future gain from the encounter, and benefit appraisals is when a gain has occurred (Lazarus, 1999; Lazarus & Folkman, 1984). When a person has appraised the situation as stressful an attempt to manage the situation is part of

the secondary appraisal process. Specifically, this process takes into account the blame or credit for an outcome (e.g., who/what is responsible for the stressful appraisal), perceptions of control, the coping strategies and the effectiveness of the strategies deployed, and future expectations. Both primary and secondary appraisals interact to generate emotions (Lazarus, 1999).

2.1.2.3 Coping

Coping is the cognitive and behavioural efforts to manage the stressors that are appraised as stressful (Lazarus & Folkman, 1984). Coping strategies have been classified into problem focused, emotion focused, appraisal focused, avoidance and approach coping (Lazarus, 1999). Problem focused coping involves an individual gathering information and using that information to change the situation (Lazarus, 1999); emotion focused coping involves managing emotional distress associated with the situation (Lazarus & Folkman, 1984); appraisal focused coping involves re-evaluating a situation in order to reduce its importance (Cox & Ferguson, 1991); avoidance coping involves the individual removing themselves from the situation or psychologically distancing from the situation (Anshel, 1996); and approach coping involves confronting the stressor and making an attempt to reduce it (Roth & Cohen, 1986). The use of these strategies has been commonly seen within literature; however, Skinner et al. (2003) criticised these distinctions in not representing the scope of coping strategies nor being conceptually clear and flexible in their application to different contexts. In an attempt to address the limitations of the previously identified coping strategies, Skinner et al. (2003) proposed 12 multidimensional and multifunctional families of coping. The families of coping include problem-solving, information seeking, helplessness, escape, self-reliance, support seeking, delegation, isolation, accommodation, negotiation, submission, and opposition. There has been support found for the application of the coping families in general psychology (e.g., Taylor & Stanton, 2007), with research in sport now beginning to pay attention (e.g., Didymus, 2016; Didymus & Fletcher, 2014; Tamminen & Holt, 2010). However, Skinner et al. (2003) suggested that certain families of coping are likely to be more relevant in certain contexts than others. Therefore, it could be assumed certain families of coping will be more relevant in certain sporting contexts than others.

Although coping is a part of organisational stress, the focus of this research programme was on the stressors, appraisals and responses (i.e., emotions) aspect of the theory. Firstly, stress and emotions are inter-related psychological variables that should not be researched independently (Lazarus, 1999). Furthermore, emotions can arise from appraisals of a range of different stressors. Sport psychology research typically focuses on the origin of stressors as antecedents of emotional responses (e.g., Fletcher et al., 2012a; Nicholls et al., 2012). Secondly, Fletcher et al. (2012a) advocated for future research to concentrate on the cognitive appraisals of stressors which sports performers encounter, as appraisal is the core of the stress process (Lazarus, 1999). Thirdly, the multiple components of the overall stress process require detailed attention and therefore it is realistic and more beneficial to consider specific elements of stress to gain a clearer understanding of these aspects in sport.

2.1.2.4 Emotions

Emotions are aroused when a situation is appraised in relation to the personal significance for well-being and the coping options available (Lazarus, 1982). In stressful events Folkman et al. (1986) suggested that people are likely to experience multiple emotions which can have more than one implication for well-being. Lazarus (1999) identified 15 different emotions which include existential emotions (anxiety, fright, guilt, and shame), empathic emotions (gratitude and compassion), nasty emotions (anger, envy, and jealousy), emotions provoked by favourable life conditions (happiness, pride, and love) and emotions provoked by unfavourable outcomes (relief, hope, and sadness).

2.1.3 Theoretical approaches to emotions

2.1.3.1 Meta-model of stress, emotions and performance

To assist in how and why emotions affect performance and well-being, Fletcher and Fletcher (2005) and Fletcher et al. (2006) introduced the meta-model of stress, emotions and performance. The model is a synthesis of mainstream and sport psychology theories that takes into consideration the transactional approach to stress. The model is divided into three theoretical stages: person-environment (P-E) fit, emotion-performance (E-P) fit, and coping and overall outcome (COO) (Fletcher et al., 2006). The P-E fit stage has the same components as Lazarus'

aforementioned components of stress; however, the secondary appraisal stage evaluates the coping strategy, it does not concern the actual implementation (Lazarus, 1999); the coping strategies are employed as part of the COO stage of the meta-model. The focus of this stage is the individual's ability to manage a situation through personal perception and relational meaning that involves appraising stressors resulting in an emotional response (Fletcher et al., 2006).

The E-P fit stage suggests that when negative feeling states occur, the relationship between emotion and performance is out of equilibrium (Fletcher & Fletcher, 2005). The stage further appraises the cognitive and somatic symptoms the individual is experiencing to be facilitative or debilitative to performance. There are two types of appraisal: tertiary, involves evaluating an emotion with regards to the relevance to performance, and quaternary appraisal occurs when meaning is ascribed to an emotion and identifies (not implements) the coping resources to deal with the emotion (Fletcher et al., 2006). Negative outcomes will occur if inappropriate coping strategies are implemented in the COO stage of the model (Fletcher & Fletcher, 2005). Coping with the stressors and responses is the main part of the COO stage. However, as the research programme is only focusing on stressors, appraisals and emotions in sport, there is no need to take into consideration the latter stages of the meta-model.

2.1.3.2 Cognitive-motivational-relational model of emotions

Lazarus (1991) expanded the transactional theory of stress to the cognitive-motivational-relational theory of emotions (CMRT). Both theories are based on the same theoretical interplay between stressors, appraisal, relational meaning, coping and outcomes (Lazarus, 2000a). However, the transactional theory focuses on psychological stress, whilst the CMRT centres on emotion. Another adaption of CMRT is the emphasis on three forms of primary appraisal and secondary appraisal, rather than the transactional theory of only primary and secondary appraisal (Lazarus, 1991). The three primary appraisal components are: goal relevance, which involves the amount stressors coincide with personal goals; goal congruence or incongruence, which involves the amount a transaction coincides with what the individual wants; and type of ego involvement, which involves aspects of ego-identity or personal commitments. The three types of secondary appraisal are: blame or credit, which is knowing who is responsible; coping

potential, which is how the individual can manage; and future expectations; which is whether things are going to change in line with goal congruence. Additionally, with CMRT, emotion is seen as a process, as such emotion is generated throughout four stages: anticipation, provocation, unfolding and outcome. Anticipation manages warning of harm or benefit; provocation is the perception of harm or benefit arising from the change in P-E fit; the unfolding is after the beginning of an emotional reaction which depends on coping reactions; and the outcome is the emotional state from the cognitive appraisal of the stressors in terms of the individual's well-being (Lazarus, 2000a). There is not enough research to suggest that a combination of transactional theory and CMRT is theoretically or methodologically valid (Lazarus, 2000a); therefore, this research programme will follow suit of previous research within sport and focus on the transactional approach to organisational stress. In particular with the programme not focussing solely on emotions as a response to stressors, it may be best to incorporate a theory that includes all outcomes to stressors.

2.1.4 Organisational stress in sport

Organisational stress has been stated to be a social psychological work-related stress (Shirom, 1982). When applying organisational stress in sport it can be conceived as an interaction between the individual and the sports environment he or she is operating in (Woodman & Hardy, 2001). Consequently, with the terms of the stress process based on general psychology, modified versions of the concepts are introduced for the application in a sporting context. In terms of stressors, Woodman and Hardy (2001) separated the origins of stress in sport by stating that issues not directly related to the sport organisation (e.g., school, parents) are not viewed as organisational stressors, yet those which are directly related to the sport organisation (e.g., coaches, selection) are viewed as organisational stressors. Fletcher and Hanton (2003) believed that differentiating between specific components of the stress process, such as competitive and organisational stress helps understanding. This proposal was derived from the rationale that stressors differ in origin and nature, different cognitive processes underlie these different stressors and specific interventions are required to manage competitive anxiety and organisational strain (cf. Fletcher & Hanton, 2003; Jones, 2002; Woodman & Hardy 2001). With the assumptions in mind,

differentiations between origins of stressors have developed even further as Mellalieu et al. (2006) regarded issues not directly related to sport performance (e.g., finance) are not competitive stressors, yet they could be organisational stressors, and those that are directly related to sport performance (e.g., opponents) are regarded as competitive stressors. Therefore, the appraisal of competitive stressors can give rise to competitive stress, which is defined as “an ongoing transaction between an individual and the environmental demands associated primarily and directly with competitive performance” (Mellalieu et al. 2006, p.4). However, a limitation of such literature is the focus on competitive and organisational stressors without considering life stressors (Nicholls et al., 2009). Nicholls et al. (2009) suggested that non-competitive stressors could influence emotional well-being (Lazarus, 1999) and also sporting performance. These issues which are not directly related to the sport organisation (e.g., family) could be considered as personal/life stressors and not organisational stressors (Fletcher et al., 2006). With the importance of the sport organisation, competition and life influencing performance and well-being, research examining all origins of stressors may provide an accurate representation of experiences encountered by individuals within sport.

Following analysis, Thatcher and Day (2008) identified two further underlying situational properties for a stressful evaluation of a stressor specific to sport: self and other comparison, and inadequate preparation. Self and other comparison is the comparison of the sports performer to a physiological, psychological or social aspect of performance of another individual; where inadequate performance is when the athlete feels unprepared for the competition. However, there is some debate as to whether these additional properties should be omitted due to their questionable conceptualisation (Didymus & Fletcher, 2012). For example, self and other comparison refers to cognitions specific to performance and inadequate preparation refers to feeling unprepared for competition rather than pertaining to some aspect of environmental demands (Didymus & Fletcher, 2012).

Capturing the multidimensional aspects of stressors that includes the origins, situational properties and nature is important when examining stress in sport. By research establishing that a stressor exists but also identifying the extent

of each stressor can help provide insightful representation of stressors (Arnold & Fletcher, 2012). Arnold and Fletcher (2012a) cited eight critical dimensions of organisational stressors to be duration (acute vs. chronic), intensity (high vs. low demand), timing (competition vs. training), prevalence (frequent vs. infrequent occurrence), quantity (many vs. few stressors), specificity (specific vs. global), closeness (proximal vs. distal to the individual), and weighting (additive or multiplicative). Arnold and Fletcher (2012a) were in agreement with Lazarus and Folkman (1984) in the recognition of the temporal course of a stressor. However, Lazarus and Folkman (1984) identified the duration of a stressor as a property which an individual could potentially appraise as stressful, whilst Arnold and Fletcher (2012a) describes duration as a description of a stressor which does not necessarily equate to the stressor as being demanding.

2.1.5 Summary of stress theory

Overall, it appears that organisational stress in sport includes additional elements to the general psychology literature that takes into consideration specific sports settings. Additionally, with the interrelationship between stress and emotions potentially causing positive as well as negative emotions, along with the popularity of positive psychology (Lazarus, 2000b), it is important to pay attention to the broad spectrum of emotions as it will address the imbalance between stress research and practice that have focussed on strain and negative emotions (Folkman, 2008). It is also important to fall in line with definitions of the stress process (e.g., origins of stressors) previously used within literature in order to aid understanding of organisational stress in sport that can affect well-being and performance.

2.1.6 Organisational stress research in sport

This review has been divided into the subsequent sections: organisational stressors, organisational stress process, qualitative longitudinal and quantitative methodologies among athletes and coaches (individually), followed by organisational stress in football; in order to summarise research focusing on the participant sample and sporting context for this research programme.

2.1.6.1 Organisational stressors among athletes

In developing the line of inquiry, several frameworks (Fletcher & Hanton, 2003; Fletcher et al., 2012b; Woodman & Hardy, 2001) have been proposed for examining organisational stress encountered by sports performers. Over a decade ago an initial framework (Woodman & Hardy, 2001) was proposed that used a transactional perspective when examining organisational demands encountered by sport performers. Woodman and Hardy (2001) interviewed fifteen elite athletes on the potential influence of factors within each area on their preparation for international competitions. The exploratory framework divided organisational issues into four main areas: personal (expectations, goals), leadership (coaching), team (support, communication), and environmental (finances, selection). Further research extended (see Fletcher & Hanton, 2003) and adopted this framework to interview elite performers from a wide of sports in terms of relating to the four areas when discussing their experiences of international competitions rather than a single sporting organisation. Both findings produced similar themes using content analysis, but the higher-order themes of travel and competition environment transpired within the environmental area and high expectations within the personal area of Fletcher and Hanton's results. However, given the conceptual origins of the framework (cf. Carron, 1982), there may be a subsequent bias toward group cohesion and interpersonal dynamics (Fletcher et al., 2012b).

In an attempt to develop this area of research in sports performers, Fletcher et al. (2006, 2012b) proposed an alternative framework of organisational stressors integrating organisational and sport psychology, consisting of three-level hierarchy with five general dimensions: factors intrinsic to the sport, roles in the sport organisation, sport relationships and interpersonal demands, athletic career and performance development issues, and organisational structure and climate of the sport. Whilst preliminary evidence was presented for the framework, the extent to which it is free from bias or completely relevant to sport is questionable due to the influence of organisational stressors from non-sport occupations (Arnold & Fletcher, 2012b).

Arnold and Fletcher (2012b) moved beyond conducting isolated studies of a limited number of sports performers to reach a complete understanding of organisational stress in competitive sport. A meta-synthesis was adopted to

develop a taxonomic classification that provides an applicable framework to classify organisational demands in athletic contexts. Taxonomy was used to arrange units into a terminology of the construct of interest (Leech & Onwuegbuzie, 2008). The specific method adopted was a meta-interpretation (Weed, 2008) as it aimed to produce new interpretations of findings more substantive that those from individual qualitative investigations (Finfgeld, 2003). After selecting a sample of studies relevant to the research area, the meta-interpretation used thematic and context analysis and exclusion criteria (e.g., participants were not sports performers) to synthesize 34 studies before saturation occurred. An inclusive approach was used to classify organisational stressors to include any environmental demand considered primarily associate with the organisation but also secondarily related with competitive or personal aspects of the performers' lives (cf. Fletcher et al., 2012b). The demands were organised into four categories: leadership and personnel, cultural and team, logistical and environmental, and performance and personal issues. Despite the taxonomy generalising stressors to a large number of sport performers of various ages, gender, nationalities, sports and standards, sport organisations are complex and continually evolving (cf. Fletcher & Wagstaff, 2009) hence it is likely that new demands will emerge that are specific to that environment.

With this taxonomy in mind, it has shown that a significant body of research has focused on detailing the organisational stressors that could result in a negative outcome in sport performers. In this area, the tendency is to use interview methods to provide in-depth information, but such research is unable to ascertain a cause and effect between variables of the stress process (Arnold & Fletcher, 2012a). Future research is needed to consider how stressors impact well-being and performance and adopt alternative methodologies to investigate the organisational stress process in sport (Arnold & Fletcher, 2012a). The following paragraphs will detail how research has tried to progress in the field by overcoming these limitations.

2.1.6.2 Organisational stress process among athletes

The organisational experiences of sports performers have gained increasing attention (Fletcher & Wagstaff, 2009). This is evident in studies examining organisational stress components and the relationships between these

components, such as stressors and responses (Fletcher et al., 2012a); appraisals of stressors (Nicholls et al., 2011); stressors and coping (Kristiansen et al., 2012); emotions (Neil et al., 2011); stress appraisals and coping among adolescents (see Tamminen & Holt, 2010 for a meta-analysis focus on coping); and stress appraisals, emotions and coping (Nicholls et al., 2010).

Fletcher et al. (2012a) provided further understanding to previous literature presenting limited descriptions of athletes' responses to unspecified events (e.g., Gould et al., 1993; Scanlan et al., 1991) by investigating athletes' responses to organisational stressors. Six male and six female athletes from five different sports at various skill levels were interviewed and responded with a range of emotions, attitudes and behaviours to organisational stressors. Negative emotions such as anger and anxiety prominently featured amongst athlete responses. However, it was noted that not all performers reacted the same way to stressors encountered. Fletcher et al. (2012a) proposed that the focus to be on athletes' appraisals of organisational stressors in order to make a greater contribution to sport psychology research. However, once again the study was influenced by a priori knowledge influenced by organisational stressors from a wide range of non-sport occupations (cf. Cooper et al., 2001). Therefore, this research programme will not consider previous a priori knowledge in order to reduce bias and gather results relevant to sport.

Nicholls et al. (2011) began to touch upon appraisals in relation to stressful encounters as being a loss or a gain and the emotions generated in response among 10 elite rugby players. Interview data were inductively analysed, and emotions were either deductively grouped into one of the 15 emotions recommended by Lazarus (1999) or inductively into a new group. Results found that generally loss generated negative emotions and gain generated positive emotions, but it is incorrect to assume certain relational meaning to particular stressors and appraisals. Of the emotions experienced 11 of the 15 proposed by Lazarus (1999) were cited, in addition to disappointment and frustration, which were not considered emotions by Lazarus. These findings provide support to the two-factor schematisation of loss and gain relational meanings within a sporting context. However, Lazarus (2000a) suggested that coping is the second most important component of the CMR theory of emotions, behind appraisals. Therefore

Nicholls et al. (2011) stated that not exploring coping was a limitation of the study, and that future research should consider the subjective opinions of athletes as it will consider the different relational meanings through similar experiences. Therefore, the PhD will gather subjective opinions of players to consider the different relational meanings through similar academy experiences. However, the research programme will not explore coping as it is important to first identify the stressors of the academy environment and then build upon the stress process. There is not sufficient scope in this PhD to accurately explore all components of the stress process with players and coaches within an academy environment.

Kristiansen et al. (2012) explored the coping strategies employed to manage organisational stressors perceived by four male and four female professional soccer players in the United States. Interviews conducted revealed the most cited organisational stressors were travel, drafting and contracts, team issues, salaries, and coach issues. Participants employed mostly problem-focused strategies and social support to manage the stressors. However, attempts to analyse the relationship between stressors and coping strategies with the inclusion of a narrative could be seen as a parsimonious overview of the data.

The interrelationships between the components of the competition stress process through stressors, appraisals, emotion responses and further appraisals that are generated were the purpose for Neil et al.'s (2011) research. Male and female athletes from non-elite and elite individual and team sports were interviewed. Various demands differed in appraisals and different emotions were experienced as a result. Specifically, similar emotions were underpinned by athletes' different cognitions of their relationship with the environment. Emotions were then further appraised to be facilitative or debilitative to performance and in some situations negatives emotions were further appraised to be facilitative for performance through increasing focus and effort. These findings suggest that it is the athletes' cognitions and their interpretations that can affect behaviour. It is important to note that the research focused on competition stress and performance and results should be made tentatively to organisational stress and general behaviour and well-being. However, to fully examine the cyclical and adaptive nature of the stress and emotion process, the focus should not be on 'snapshots' of time (i.e., interview method) but through a longer time period (i.e.,

diary method; Neil et al., 2011). Furthermore, intensity of emotions has highlighted the existing differences between individuals when exploring interpretations of anxiety (see Mellalieu et al., 2006). It is assumed emotion intensity could affect emotional orientation and subsequent behaviour in sport (Neil et al., 2011), therefore future research should consider intensity of emotions when investigating the stress and emotion process.

To advance theory and recognise the inter-related psychological variables, Nicholls et al. (2010) explored the relationships between stress, emotion and coping. Specifically, the focus was on emotions generated during or after stress appraisals, coping and the outcome of an event. Ten male adolescent golfers were given definitions of the stress components within the interviews. Stressors and coping strategies were analysed inductively, whilst emotions and outcomes were analysed deductively into either Lazarus' (1999) emotions or one of the following three outcomes: favourable, unfavourable, or neither favourable nor unfavourable. Despite the outcome, the most cited emotion during or after appraisals was anxiety. Results also revealed that after a favourable outcome, relief and happiness anger were the most frequently cited; during unfavourable outcomes, anxiety, anger and happiness were reported; and in neither, only anxiety was reported during or after stress appraisals. Players reported a range of emotions at different phases of the stress process and that more than one emotion can be experienced simultaneously. Generally, favourable outcomes generated positive emotions, whereas unfavourable or neither favourable nor unfavourable outcomes generated negative emotions. However negative emotions were generated after favourable events and vice versa, which could be due to participant past experiences (Nicholls et al., 2010). Like Neil et al. (2011), Nicholls et al. (2010) focused on competitive situations, however this research programme is exploring the organisational environment along with training environments that have the potential to be stressful also (e.g., Nicholls et al., 2009).

Overall, these studies have furthered understanding of the organisational stress experiences amongst athletes by promoting a general outlook of the transactional process and providing some insight into why performers respond in certain ways when operating in their sport environment. However, in order to streamline research and overcome previous aforementioned limitations, future

research should take into consideration participants' perspectives of one gender from a single level of sport that focuses on more than the competition environment. Furthermore, in reference to the transactional perspective of stress and CMR theory of emotion, the consideration of stressors and appraisals is of equal importance. Researchers are increasingly interested in the appraisal mechanisms that are pivotal during sport performers' organisational stress transactions (e.g., Didymus & Fletcher, 2012, 2014, 2017) where athletes make both negative (Hanton et al., 2012) and positive (Didymus & Fletcher, 2017) appraisals of organisational stressors. Hence, future research to provide a more accurate account of stressors, appraisals, emotional response, and behaviour requires further attention (Hanton et al., 2008). Therefore, this research programme will focus on these specific aspects of the organisational stress process.

2.1.6.3 Qualitative longitudinal methodology and research among athletes

Despite all aforementioned studies providing further evidence to the wide range of organisational stressors of sports athletes, there tends to be a heavy focus on retrospective accounts using interviews. Researchers (e.g., Lazarus, 1999) have called for a more descriptive exploratory work to provide a basis for understanding complex person-environment interactions. In order to capture the dynamic nature of organisational stress, a better approach is diaries as they are a self-report instrument used to repeatedly examine ongoing experiences which reflect the importance of contexts in which these processes unfold (Bolger et al., 2003). Furthermore, longitudinal research using a prospective design will capture the frequency of these experiences over a period of time and capture specific changes in the stress process (Holt & Dunn, 2004; Nicholls et al., 2006).

Acknowledging the rationale for research in the area, this methodology has been used in various sports focusing on athlete experiences (e.g., Didymus & Fletcher, 2014). Furthermore, in line with research looking beyond organisational stressors, literature within this area has investigated the relationships between the components of the stress process, namely appraisals of stressors (e.g., Didymus & Fletcher, 2012; Hanton et al., 2012); appraisals and coping strategies to stressors (e.g., Didymus & Fletcher, 2014); stressors and coping (e.g., Nicholls et

al., 2005); and perceived control, coping and coping effectiveness to stressors (e.g., Reeves et al., 2011).

Hanton et al. (2012) explored the cognitive appraisals of organisational stressors among male and female sports performers from team and individual sports using a diary over a 6-week competition period. Instead of focusing on theoretical appraisals, this exploratory work attempted an open approach allowing appraisal themes to emerge from the data. Participants completed stress appraisal logs (SAL) within 12 hours of encountering a stressor, which included three open-ended response sections: stressor, appraisals, and responses. Education and orientation packs were provided to the participants involving the definition and examples of organisational stress from Fletcher et al. (2012a). Overall, 42 SAL's were completed from which 86 appraisals were identified and organised into three higher-order themes within the primary appraisal dimension (harms, threats, and challenges), three higher-order themes within the secondary appraisal dimension (restricted resources, action could be taken, and had to hold back) and a reappraisal dimension. Findings revealed that generally athletes appraised organisational stressors as threatening with 42% of the stressors causing threat or harm arising from factors intrinsic to the sport, and secondary appraised as having "restricted resources" (52%) or "had to hold back" (30%). The results support the transactional perspective in that athletes respond to organisational stressors by reflecting on their personal meaning of the stressor, evaluate the management of the stressor and reappraise the stressor in a new manner. The research gathering numerous appraisal patterns allows many potential areas for future research in sport. Hanton et al. (2012) advocated the further use of the SAL in longitudinal research with athletes as it promotes understanding, collects numerous cognitions involved in stress processes, and mirrors the methods used in sport (e.g., training or diet logs). One suggestion for the development of the SAL would be to include intensity measures for meaning, control, and appraisal components (Hanton et al., 2012).

Didymus and Fletcher (2012) believed that the findings from Hanton et al.'s (2012) work need to be treated with caution due to the low sample size (n = 4) and the lack of recognition of the organisational stressor situational properties. In keeping with examining transactional alternatives that an individual experiences

(overcoming Thatcher and Day's limitation), relevant demands and the transactional alternatives that athletes experienced in relation to each situational property were identified. A larger sample size of eight male and seven female high standard swimmers were recruited and completed an adaptation of the SAL at 18:00 on a daily basis for 28 days, which represented training, competition, and recovery periods. Following the withdrawal of two participants and omitting Thatcher and Day's (2008) additional situational properties, 341 stressors were characterised into four general dimensions of logistical and environmental issues, cultural and team issues, performance and personal issues, and leadership and personnel issues (cf. Arnold & Fletcher, 2012b). Results supported Neil et al. (2011) which found athletes responded to organisational stressors negatively and Hanton et al. (2012) which found sources of organisational strain to be predominantly appraised as threatening or harmful/loss. Support was also found for Lazarus and Folkman's (1984) situational properties with the exception of temporal uncertainty. In particular, imminence was associated with the largest number of threat appraisals, novelty was associated with the largest number of challenge appraisals, and duration was associated with the largest number of harm/loss appraisals. There was no consistent pattern to the remainder of the properties suggesting that swimmers appraise these stressors differently. However, the data analysis procedures implemented deductively aligned themes to theory and research which could compromise the novelty of the findings (Didymus & Fletcher, 2012). Furthermore, swimming could also account for the certain types and situational properties of stressors present in the study. It could be that other sports are more susceptible to the presence of other situational properties, for example, football and temporal uncertainty since football matches are more likely to be postponed than swimming meets. Didymus and Fletcher (2012) proposed that future research should consider organisational stressor and appraisals changes over time. Patterns between the components of the stress process and the temporal patterns will enhance literature in this area as well as provide support to athletes as specific phases over their sport season. Therefore, this research programme will capture organisational stressor and appraisal changes over a football season.

Didymus and Fletcher (2014) continued their longitudinal research examining organisational stressors and appraisals with the addition of coping. The

purpose was to address the gaps in organisational literature that needed to investigate in further detail the stressor-coping link (Weston et al., 2009) whilst not ignoring the way an individual appraises a situation (Dewe et al., 2010). High standard female and male swimmers completed an adapted SAL as well as identifying coping strategies used and the perceived effectiveness of these strategies on a Likert-type scale daily at 18:00 for 28 days. Once again, stressors were deductively categorised under general dimensions (cf. Arnold & Fletcher, 2012b), appraisal meanings were deductively classified using Lazarus and Folkman's (1984) transactional alternatives (i.e., harm/loss, threat or challenge), and now coping was deductively categorised in accordance with Skinner et al.'s (2003) family. Stressors appraised as non-stressful were removed from the data as they could not be deemed as taxing or exceeding the participants' resources (Didymus & Fletcher, 2014). Following the withdrawal of two participants, no support was found for the opposition and isolation families of coping. Results demonstrated a variety of coping strategies employed in isolation and in combination, with the appraisal mechanisms and coping effectiveness linked to the coping families used. For example, harm/loss appraisals were typically associated with accommodation, helplessness and submissions families of coping and coping family combinations were on average perceived to be less effective than isolated coping strategies. The limitations of the study were the same as Didymus and Fletcher's suggestions (2012) with the addition of the difficulty in identifying what criteria participants used to judge the effectiveness of their coping strategy when self-reporting. Future research was suggested for the inclusion of coping, which is not in this PhD's remit. The focus of the research programme is to first identify the stressors and then build upon the organisational stress process by examining appraisals and emotions. Didymus and Fletcher (2014) did allude to gender being a moderator of the organisational stress process in sport. Since the current research programme will only include male football participants, this will overcome the moderation of gender potentially overlooked in Didymus and Fletcher's (2012; 2014) longitudinal research.

Due to the lack of research concerning young athletes' abilities to cope with stressors in a particular sport (Crocker & Isaak, 1997), Nicholls et al. (2005) sampled 11 international male adolescent golfers to identify the stressors and examine the coping strategies used over a 31-day competitive period. Participants

completed daily dairies on the evening of each golf day yet not on the days they did not play. The diary consisted of a stressor checklist adapted from Anshel (1996) and open-ended coping responses section. Four stressors (making a physical error, making a mental error, observing an opponent play well, and difficult weather conditions) totalled to over 75% of all stressors reported over time. The changes in frequencies of the stressors coincided with the relative importance of the golf competition. Blocking, and then increased concentration and technical adjustments were the most cited specific coping responses, and problem-focused coping strategies were reported more than emotion-focused or avoidance coping.

Longitudinal studies thus far have examined organisational stress with a focus on differing sports and genders (e.g., Hanton et al., 2012), or individual sports athletes (Didymus & Fletcher, 2012, 2014; Nicholls et al., 2005). Nicholls and Polman (2007) began assessing longitudinal stress among adolescent team sport athletes of international rugby. The most reported organisational stressors were physical errors, criticism from coach/parents, mental errors, injury, and observing opponents play well; with problem focused coping strategies being the most cited coping strategy. The research supported Nicholls et al. (2005), however both studies invited athletes to report organisational stress from rigid checklists which may create an incomplete depiction of the range of organisational stressors experienced. For example, Anshel's (1996) checklist only identified eight typical sources of acute stress experienced in team sport competition and failing to consider stressors from the environment and sources of organisational stress. Furthermore, adolescent research has not examined the importance of appraisal in longitudinal research. Overall, the aforementioned longitudinal research limits the understanding of organisational stress changes over time periods greater than a month. Hence, future research should consider this important for the development of practical applications to stress that can be directed at specific stressors during the phases of a sports season.

Hayward et al. (2017) examined adolescent swimmers', their mothers' and coach's individual and shared stress experiences (stressors, appraisals and coping) using daily diaries and three semi-structured interviews over a 6-week period leading up to a major competition. Participants had a range of stress experiences that included personal competitive, and organisational demands with

appraisals relating to factors such as reactions of others, training progress and competition performances. The types of stressors and appraisals changed over time. There were a few areas where athletes and parents shared or influenced each other's experiences (e.g., seeking social support). This suggests the important role parents play in adolescent athletes' stress experiences. However, the examination of parents' stress experiences was not explored in this research programme. This is because examination of organisational stress in academy football is novel and so it is fitting that players' and coaches' experiences would be first beneficial to explore as they are constantly in that environment. Furthermore, there was also evidence of shared stress experiences between all three triad members, for example, movement between squads and session attendance. Again, it was suggested to fully explore the temporal nature of stress encounters, future studies should consider extended longitudinal investigations such as over a competitive season (Hayward et al., 2017). Hence the research programme will explore organisational stress experiences (particularly stressors and appraisals) of adolescent players and coaches over a competitive season in a specific sport.

2.1.6.4 Quantitative methodology and research among athletes

Despite the extent of knowledge on organisational stressors, Fletcher and Hanton (2003) believed that in order to make significant advances in the understanding of organisational stress a valid and reliable measurement tool must be designed. However, Lazarus (1990) recognised that it is difficult to take a holistic approach to develop a single satisfactory measure. Consequently, Arnold and Fletcher (2012b) thought that it would be more pragmatic to develop a series of measures assessing components of the stress process rather than a single measure of organisational stress. Arnold and Fletcher (2012b) proposed 15 recommendations (e.g., wording and phrasing of items, assess the multiple dimensions of stressors, and large sample size for confirmatory factor analysis) to take into consideration when developing an organisational stressor measure. As a result, Arnold, Fletcher and Daniels (2013) developed and validated a measure called the Organisational Stressor Indicator for Sport Performers (OSI-SP). The OSI-SP can be used to assess multiple dimensions (i.e., frequency, intensity and duration) of organisational stressors experienced by sport performers in five organisational domains. These domains are goals and development (e.g.,

individual's progression in sport), logistics and operations (e.g., the arrangement for training/competition), team and culture (e.g., attitudes within the team), coaching (e.g., coaches' personality), and selection (e.g., how individuals are chosen for competition). The OSI-SP also gained further support for the cross-cultural validity of the measurement across British and Malaysian cultures (Arnold et al., 2016).

Researchers have begun to use the OSI-SP in organisational stress literature in particular to investigate the demographic differences in sport performers' experiences of organisational stressors and to examine the effects of organisational stressors and coping styles on outcomes in competitive sport (Arnold et al., 2015, 2017 respectively). Arnold et al. (2015) took into consideration that personal and situational characteristics can act as a buffer or exaggerate an individual's appraisal of the situation or between the resultant emotion and performance (Fletcher et al., 2006). Hence, individuals can experience situations different from one another. Specifically, studies have identified gender (Woodman & Hardy, 2001; Fletcher & Hanton, 2003) as well sports performers across different sports and at different levels (Fletcher et al., 2012a; Mellalieu et al., 2009) to differ in organisational stressors experienced. Therefore Arnold et al. (2015) examined if a greater range of organisational stressors and their dimensions vary as a function of sport performers' gender, sport type (team and individual performers), and performance level (national/international and regional/university/county/club level) using the OSI-SP. Findings showed demographic differences in the five dimensions, in particular that males experienced higher frequency, intensity, and duration of logistics and operations organisational stressors, whereas females experienced higher frequency, intensity, and duration of selection organisational stressors; team-based performers experienced higher frequency, intensity and duration of logistics and operations organisational stressors than individual performers; and performers at a higher level typically experienced higher frequency, intensity, and duration than lower level performers. However, by omitting demographic differences the research programme will rely upon a relatively homogenous sample, such as all male participants, within the same sport (football), and competing at the same academy level, thus reducing the individual differences between participants.

In addition to investigating the organisational stressors sports performers experience, like aforementioned research using interviews and longitudinal diaries to explore reactions to these demands, researchers implementing quantitative methodologies have followed suit. Bartholomew et al. (2017) examined the appraisal of organisational stressors encountered by a range of athletes and its relation to their basic psychological needs using the OSI-SP; the relationship between stress and psychological needs is however deemed beyond the scope of this research programme.

Larner et al. (2017) presented two studies examining the relationship between organisational stressors and burnout in sport by focussing on the moderating role of surface acting (i.e., only regulating emotional expressions) and the impact these relationships have on turnover intentions. In study one, athletes, coaches, performance directors and sport scientists within individual and team sporting environment of a variety of performance levels completed the OSI-SP, the emotional labour scale (ELS; Brotheridge & Lee, 2003), athlete burnout questionnaire (ABQ completed by athletes; Raedeke & Smith, 2001), coach burnout questionnaire (CBQ completed by coaches, performance directors and sport scientists and altered from the ABQ) and turnover intention. Results found at comparable stressor levels, surface acting increased burnout and turnover intention. Study two used a longitudinal design over 6 months to better capture the complex, ongoing nature of organisational stressors (Larner et al., 2017). Study two examined the influence of surface acting in the relationship between organisational stressors from time 1 and turnover intentions and actual turnover at time 2. Ninety participants from the same demographics as study one completed the OSI-SP, ELS, turnover intentions and a single item actual turnover question “I am no longer part of this sport organisation.” Results revealed the relationship between organisational stressor frequency in time 1 and turnover intentions in time 2 was only significant at higher levels of surface acting. At comparable levels of organisational stressors, those with greater emotional labour express an increased desire to leave their sporting organisational after 6 months, yet do not actually leave. Overall, the studies showed the importance of measuring organisational stressors dimensions and the correlation to emotions, extended quantitative research in organisational psychology in sport, and provided a novel contribution in the use of a longitudinal design (Larner et al., 2017). However, the absence of

multilevel analyses allowing for the clustering of data due to the various sports, levels and job roles could be a potential limitation. In addition, modification of established psychometrics (i.e., OSI-SP and ABQ) occurred for use in other populations (i.e., coaches, sports directors and sport scientists). Larner et al., (2017) suggested that the identification and development of the OSI-SP for other populations is warranted and would aid future research in the area. This thesis will also examine further organisational stressor dimensions using the OSI-SP (as detailed below), extend quantitative research in organisational psychology in sport and provide a novel contribution in the use of a longitudinal design in study 3 by focussing on one sport (football), one population (players) at the same level (elite academy).

Wagstaff et al. (2018) explored aspects of the research of Larner et al. (2017) a little further by identifying if the frequency of organisational stressors encountered by athletes and coaches was related to burnout dimensions and if psychological resilience qualities moderated the relationship between organisational stressors frequency and burnout. Participants with similar demographics to those from Larner et al. (2017) completed the OSI-SP, ABQ (for athletes), CBQ (for coaches) and the Connor-Davidson Resilience Scale-10 (CD-RISC-10; Campbell-Sills & Stein, 2007). Results highlighted a positive correlation between organisational stressor frequency and athlete burnout. In coaches, as psychological resilience increased, a significantly weaker relationship between organisational stressors and burnout was found. Overall, organisational stressor dimensions were positively related to all dimensions of burnout for both athletes and coaches. Future research was suggested to employ longitudinal designs and utilise the most psychometrically robust inventories for coaches.

Directing research to focus on organisational stress components, Arnold et al. (2017) examined the relationships between organisational stressors on positive affect, negative affect and performance satisfaction; and coping styles on positive and negative affect. Participants were sampled from a range of demographics where it was found that goals and development duration and intensity, as well as team and culture frequency and intensity had a main positive effect on negative affect. In addition, problem-focused coping had a main positive effect on positive affect and emotion-focused coping had a main positive effect on negative affect.

The results provide support for the meta-model of stress, emotions and performance (Fletcher et al., 2006) in that certain organisational stressors and coping styles are associated with various outcomes. The research highlights the importance of situational aspects (e.g., dimensions) of organisational stressors since their exclusion has been identified as a shortcoming in previous stress in sport research (Nicholls & Polman, 2007). Future research could also employ longitudinal designs to establish the nature of the relationship between stressors and outcomes (Arnold et al., 2017). Hence, Study 3 will further explore organisational dimensions and emotions quantitatively using a longitudinal design within academy football.

Overall, since the development of the OSI-SP, there have been only a few quantitative studies published that have used the indicator (i.e., Arnold et al., 2016, 2017; Bartholomew et al., 2017; Larner et al., 2017; and Wagstaff et al., 2018). To extend this design and progress on the topic, further researchers should use this measure to capture the wide scope of potential research designs in organisational stress in sport research. In particular, Arnold et al. (2017) advocated future research to test hypotheses with multiple independent and dependent variables sampled from different organisations (cf. Byrne, 2013; Ntoumanis et al., 2015). Thus, this will be employed in the current research programme in order to explore adolescent players' experiences of the football academy status 1-3 environments within the youth development phase.

2.1.6.5 Organisational stress among coaches

Organisational stress not only affects sport performers, coaches can also be affected. Frey (2007) was the first study to gain an understanding of the coaches' experiences with stress, perceived effects of stress on coaching performance and their associated coping strategies. Ten National Collegiate Athletic Association (NCAA) Division One coaches were interviewed and findings indicated that there were multiple sources of stress with the most stressful including communicating with athletes, lack of control over athletes, recruiting, and the pressure of having multiple roles and responsibilities. Furthermore, coaches' responses to and effects of stress were facilitative (e.g., enhance motivation and better preparation) and debilitative (e.g., negative effects for athletes and difficulty in making decisions). Despite Frey's (2007) results highlighting some of the

sources of stress and its perceived effects experienced by coaches, one limitation of the study was the standard of the participant sample. Using collegiate coaches suggests the level of athletes with whom they worked with were not ‘elite’ and further research was required at a higher standard of coaching in sport.

Thelwell et al. (2008), Olusoga et al. (2009) and Didymus (2017) attempted to address this gap in the literature. Thelwell et al. (2008) interviewed 10 coaches employed by their respective governing bodies or by professional clubs and who worked with elite athletes from various team and individual sports. When examining the performance and organisational stressors experienced by coaches, performance stressors were divided between their athletes’ and their own performance while organisational stressors were in the form of leadership, personal, team and environmental issues. Whereas Olusoga et al. (2009) interviewed 12 coaches from a wide range of sports who had previously coached at the Olympic games, world championships, world cup and/or Commonwealth games. Ten higher-order themes were identified as stressors encountered by elite coaches (e.g., conflict, athlete concerns, competition preparation, organisational management and isolation). Didymus (2017) interviewed six women and nine men who coached individual and team sports at Olympic or international level. During the first part of the study, coaches reported ten themes as stressors: athlete concerns, coaching responsibilities, expectations, finance, governance, interference, organisational management, performance, preparation and selection. Despite these studies providing further support to the stressful nature of coaching by indicating that world class coaches also experience a wide range of stressors, they are not without their limitations, most notably the transferability of findings to specific sports settings (Thelwell et al., 2008). It is plausible to consider that the stressors may vary depending on the sports organisation setting and sport type. For example, the financial resources made available to coaches from organisational bodies or training athletes in team and individual sports may be particular to an organisational structure and sport; hence further research needs to consider the specific organisational environment of a sport to provide a clearer understanding of coaches’ stress experiences.

2.1.6.6 Organisational stress process among coaches

While organisational stress research amongst coaches began by identifying stressors, studies of coaches' responses to stressors have gained further attention. Typically, research has concentrated on burnout in coaches (see Goodger et al., 2007, for a review) with a lack of interest towards immediate and positive responses of organisational stress (Olusoga et al., 2010). Olusoga et al. (2010), Thelwell et al. (2010), and Didymus (2017) attempted to address this gap in the literature. Olusoga et al. (2010) investigated the responses to and effects of stress alongside the coping strategies used to manage stress in UK world class coaches across different sports. Coaches reported psychological, behavioural and physical responses to stress, and suggested that their negative responses could have a negative impact on their athletes. A wide range of coping strategies emerged with structuring and planning as the most cited. Whereas Thelwell et al. (2010) explored the specific associations between stressors and the coping strategy use of three male, professional, team sport coaches. Coaches selected stressors to be performance and organisational related with associated coping strategies of problem, emotion, avoidance, appraisal and approach focus. More than one coping strategy was used for each stressor and the coping strategies employed were not for the same type of stressor. Lastly, Didymus (2017) used the CMRT to examine the situational properties, appraisals and ways of coping within the psychological stress process of female and male, international, individual and team coaches. Findings suggest that 10 major themes were underpinned by seven situational properties (e.g., ambiguity, imminence, novelty), appraised mostly as challenge and threat, and related to seven families of coping (e.g., support seeking) which each were different in the adaptive processes.

Despite all aforementioned studies providing further evidence to the organisational experiences of sports coaches as with athletes, there tends to be a heavy focus on retrospective accounts using interviews. Researchers (e.g., Lazarus, 1999) have called for a more descriptive exploratory work to provide a basis for understanding complex person-environment interactions. In order to capture the dynamic nature of organisational stress, a better approach is diaries as they are a self-report instrument used to repeatedly examine ongoing experiences which reflect the importance of contexts in which these processes

unfold (Bolger et al., 2003). Furthermore, longitudinal research using a prospective design will capture the frequency of these experiences over a period of time (Nicholls et al., 2006).

2.1.6.7 Qualitative longitudinal methodology and research among coaches

Acknowledging the rationale for research in the area, longitudinal research using a diary has been used in various sports focusing on athlete experiences (e.g., Didymus & Fletcher, 2014) with a limited number concentrating in the area of coaching experiences. Levy et al. (2009) are the only researchers to explore the organisational stressors, coping and perceptions of coping effectiveness longitudinally using a diary. Over a 28-day period one male elite head coach of an aquatic sport completed daily diaries which identified administration, overload, competition environment, the athletes, and team atmosphere as over half of the reported organisational stressors. Despite the varied organisational stressors, only a small number reoccurred over time with the most frequently cited coping strategies as communication, preparation, planning, social support, and self-talk, which were generally effective, but effectiveness declined over time. Although Levy et al.'s study is the first to consider organisational stressors and coping over a period of time, several limitations remain. First, the generalisability of the findings is limited due to the single participant sample from a single sport. Future research needs to consider a larger sample across different sports in order to account for the specific organisational environments of that sport, which may provide a clearer understanding of coaches' stress experiences. Second, the failure to find a higher frequency of reoccurring stressors alongside changes in coping dimensions could be due to the short 28-day period of the study (Levy et al., 2009). Future research should explore the experiences amongst coaches over a longer period of time, for example, a sporting season, to develop our understanding of their periodic experiences. This will be explored in the current research programme.

2.1.6.8 Quantitative methodology and research among coaches

Quantitative methodology and research amongst coaches has been previously discussed in Section 2.1.6.4, Wagstaff et al. (2018). This highlighted the beginning and lack of quantitative research exploring organisational stress upon coaches in sport. Specifically, the positive relationship between frequency of

organisational stressors and burnout of coaches and the illustration of resilience in this relationship. Despite the focus on psychological resilience qualities moderating the organisational stressors frequency and burnout, future research suggested to employ longitudinal designs and utilise the most psychometrically robust inventories for coaches.

2.1.6.9 Organisational stress research in football

Stress within football has often focussed on the relationship between recovery-stress and performance of players highlighting the psychological and physiological responses (e.g., Faude et al., 2011; Laux et al., 2015; Olmedilla-Zafra et al., 2017). However, research taking an organisational stress perspective within football is very limited, particularly in elite youth sport which is under-represented in sport psychology literature (Pain & Harwood, 2007). Recent research by Reeves et al. (2009) explored the stressors and coping strategies among early and middle adolescent academy football players in the Premier League. This study was the first to identify specific stressors young elite football players experience within their academy environment. Results found mid-adolescent players experienced more stressors than early adolescent players, and both groups experienced common (e.g., making errors and team performance) and different stressors (e.g., early adolescents: family; mid-adolescents: coaches and contracts). Despite providing a greater understanding of the demands academy footballers face, a definition of stress was used when interviewing which could potentially lead and restrict the detailed responses provided by the participants. Future research must be aware of the potential biasing that may result as a consequence of providing leading definitions (Thelwell et al, 2010). Therefore, this current research programme will not provide definitions to participants prior to interview in order to reduce bias.

With the lack of longitudinal research exploring the organisational experiences into a single sport of elite youth football, Reeves et al. (2011) used this methodology alongside diaries to compare stressors, perceived stressor control, coping and coping effectiveness among early and middle adolescent players within a football academy. Findings showed subtle stressor differences among mid-adolescent (e.g., injury) and early adolescent players (e.g., opponent cheating). Stressor frequency fluctuated across the season differently between

groups. Age differences were also found in the coping strategies and their effectiveness as mid-adolescents used more emotion-focused and avoidance coping strategies and coped more effectively than early adolescent players. However, in football, the introduction of the EPPP was subsequent to these studies and so in line with the provision specific environments were created for different age groups by the academy structure (e.g., foundation, youth development and professional development phase; The Premier League, 2011). Hence, these specific contexts were not taken into consideration when Reeves et al. (2009, 2011) examined the organisational experiences of different ages of players. This research programme will however take into consideration the academy structure and will focus on the youth development phase. Furthermore, with the EPPP creating different academy environments (e.g., category 1 is optimum, category is developmental, and category 3 is entry level development), these contexts must also be taken into consideration when examining organisational stress. No current literature has explored different academy status environments within elite football. Therefore, this thesis will also explore different category players and coaches' organisational stress experiences.

There is a lack of research into elite youth sport in football concerning players but there are significantly fewer studies concerned with elite youth football coaches from a transactional stress perspective. Dixon et al. (2016) were the first to use a sample of academy coaches (and using quantitative methods) to examine the relationships between challenge and threat appraisals of stressful events with behaviour, and the influence of irrational beliefs upon coaches' challenge and threat appraisals. Findings revealed a significant positive association between threat appraisals and autocratic behaviour, a significant negative association between threat appraisals and positive feedback, and that higher irrational beliefs were associated with greater threat appraisals. A significant positive association between challenge appraisals and social support was found suggesting that coaches should try to appraise stressful situations as challenging in order to promote positive coaching behaviours (Dixon et al., 2016). However, participants were asked to recall the details of the stressful events over the last month, which could impair the memory retrieval process (Kulmann et al., 2005) and is one of the limitations of using self-report measures. In Study 2 of this research programme

players and coaches will detail same-day experiences including an aspect of appraisal to overcome this limitation.

With the unique context of academy coaching, managing relationships with concerned parents and child athletes who are experiencing pressures whilst attaining a balance between short-term performance and long-term development, academy coaches' experiences of stress warrant further investigation (Dixon & Turner, 2018). Furthermore, there is a lack of research investigating how and why coaches experience similar stressors in different ways (Fletcher & Scott, 2010). Dixon and Turner (2018) examined the stress appraisals of UK football academy coaches to try and understand this area further. Seven full-time academy coaches were interviewed using the interpretative phenomenological analysis (IPA) approach. Coaches were asked to rank stressful situations in order of prominence to stimulate the discussions within their interviews. Findings revealed that coaches are subjected to a range of stressors (match outcome, player performance, conflicting tasks, time pressures, relationship management, and uncertainty) that created experiences of pressure, anxiety and damage to self-esteem. Dixon and Turner (2018) questioned if the performance of others should be added as a dimension to the stress appraisal process. Whilst this thesis does not provide a complete representation of the appraisal process and could not verify the addition of another dimension, by examining an aspect of appraisal offers valuable insights and can be used to provide convergent evidence of stress appraisal phenomenology.

2.1.7 Summary of organisational stress research

It is important to address the concerns surrounding previous organisational research covered in this chapter in order to further understanding and allow the research programme to extend and bring an original contribution to the literature. The gaps in the research suggest sampling athletes and coaches who are the same gender, from the same single team or individual sport and who are at the same professional level in that sport. Hence this research programme will sample male athletes and coaches from the team sport of association football who are from elite professional football academies. Secondly, any data collection and analysis methods will not by influenced by previous frameworks and will not restrict or lead participant answers, so definitions of terminology and deductive

analysis will not be included in this research programme. Thirdly research needs to focus on coaches' and athletes' positive and negative perspectives in adolescent sport particularly football since the evolvement of the academy environment as a result of the EPPP. The research programme will pay attention to this environment by overcoming limited literature to firstly identify organisational stressors. Once a more realistic account of the stressors encountered has been identified, the research programme can then extend the line of inquiry into the organisational stress process, specifically appraisals and emotions, by employing different methodological approaches that consider the sequential nature of the transaction (Neil, 2007). For example, longitudinal studies using a diary over the course of a season which will incorporate the SAL but no stressor checklists; and quantitative studies using the OSI-SP and objective measures of performance within a short recall period.

2.2 PART TWO: THE PERFORMANCE ENVIRONMENT

Another line of inquiry salient to organisational issues in elite sport is research looking into the performance environment, which has extended the understanding of the environment from a practical application. Following the example of Gould (Gould et al., 1999, Gould et al., 2002a, 2002b) and colleagues appointed by the US Olympic Committee, the FA commissioned a research project to explore the factors perceived to influence team and individual sport performances at international youth tournaments in order to help coaches manage the environment more effectively (Pain & Harwood, 2007). Pain and Harwood (2007) qualitatively identified the factors perceived to impact tournament performance of England youth football teams. Data from players, coaches and support staff revealed organisational factors to positively (tournament strategy and experience, team cohesion, player understanding, opposition knowledge, effective recovery and entertainment activities) and negatively (player boredom and fatigue, over-coaching and lack of opposition information) influence performance. Eight overall dimensions: planning and organisation, physical environment, tactical factors, development and performance philosophy, psychological, physical, social and coaching factors emerged to develop a performance environment framework. Although Pain and Harwood interviewed participants directly about the

tournaments three weeks subsequent rather than previous studies later time frame of the interviews about a general competition (e.g., Gould et al., 2002a), the retrospective design could result in hindsight bias. Furthermore, the commissioning of the research by the FA could taint the participants' responses due to the pressure not to criticise and to conform to the organisation.

The second study of the FA research project developed a conceptually grounded questionnaire from the performance environment dimensions found by Pain and Harwood (2007) to quantify the extent and magnitude of the perceived factors to impact performance (Pain & Harwood, 2008). Participants, who were on average 16-year-old players and staff, completed the Performance Environment Survey (PES) at six international youth football tournaments over a two-year period. Items for the PES were generated from the themes identified in Pain and Harwood's (2007) first study. The PES was developed to be an applied research tool empirically grounded rather than theory driven and consists of participant background, tournament experience, factors influencing player performance, factors influencing team performance, and further comments. Findings revealed team and social factors were perceived to have the greatest positive impact, with variables such as players losing composure, player boredom and lack of entertainment activities perceived to have a negative impact on performance. Pain and Harwood (2008) suggested that the PES could be used to audit the performance environment for areas that could be improved and modify the PES in order to use it for longitudinal analysis of season long data in football clubs. However, the validity and reliability of the PES have not been tested and so future research would need to establish the psychometric properties (Pain & Harwood, 2008). Additionally, the PES was developed from the interview data gathered from a small specialised sample of participants in Pain and Harwood's (2007) study (i.e., players = 4, coaches = 6, sport scientists = 3). To realise a more complete understanding of the performance environment in youth football, it is necessary to consider the experiences of a larger number of performers.

These two studies corroborated previous research by Gould et al. (1999) that the performance environment is multifaceted, with performance dependent upon interacting factors which go beyond established psychosocial and physical domains. The practical implication from the research programme suggests that the

management of the performance environment should help to improve team performance in elite youth football. Pain and Harwood (2009) utilised this applied approach for an intervention study with a university football team during a competitive season. After each game the PES was used to collect performance environment data from players and staff. Subsequently this data were used a base for discussions on team functioning between players and coaching staff. Findings revealed that the intervention improved perceptions of team functioning, training quality, self-understanding, player ownership and team performance.

Despite Pain and Harwood's (2009) intervention centring upon the sport psychologist stimulating discussions, the importance of the sport psychologist working with the football coach cannot be ignored. Gilbourne and Richardson (2005) stated that working in professional football involves working with coaches and by doing so can help bring about institutional change. Nesti (2010) also outlined the role of sport psychologists in supporting the development of the coach, which falls in line with a component of the FA's psychology strategy for coaches to understand psychological issues within the team environment. Action research is suggested as an example to add to the limited intervention studies detailing how sport psychologists can support coaches (Pain et al., 2012). Pain et al. (2012) followed an action research design to assist the coach of a university football team in managing the performance environment during a competitive season. The PES, meetings, interview and a journal were employed to inform, monitor and evaluate impact in the study. Results indicated that the coach perceived the PES to be beneficial in managing the performance environment. In particular, improvements in team functioning were found after the coach had taken action in changing the team/social and physical preparation/fatigue domains from the PES. These findings provided support for the conceptual framework of the performance environment defined by Pain and Harwood (2007; 2008).

With the successful application to practice of the PES managing the performance environment in university football longitudinally from Pain and Harwood (2009) and Pain et al. (2012), future research is required for the transference to elite football. Within the university season only eight games over a 24-week period with two breaks occurred, compared to an on average elite football season of at least 38 games over a 46-week period with no breaks, and an

average elite football youth development phase academy season of at least 40-50 games over for the season (U12-U13s September to July with 5-week winter break, U14s September to May with 2-week winter break, and U15s-U16s July to May with 2-week winter break). The methodological application of Pain and Harwood (2009) and Pain et al. (2012) might not be feasible in elite football environments due to the increased number of games resulting in an increase in time demands for completion of the PES, the reflective meetings and coach's journal. Future work establishing the use of the PES in elite football environments is needed. Pain and Harwood (2008) suggested an adaptation to the PES for use in club football. In addition, Pain and Harwood (2009) and Pain et al. (2012) found implementing the PES made a change to certain aspects of the performance environment, however the PES was originally developed to identify factors in order to improve competitive performance. Future research should test the relationship between performance environment changes and the impact this has on competitive performance.

2.2.1 Summary of performance environment literature

Overall, it appears the research has an applied understanding of the performance environment within elite youth football, but less is known about this sample within a football academy environment. Additionally, further development is needed to provide evidence for the psychometric properties of the PES, in particular for usage in different football settings. Another area that needs attention is quantitative research which examines the performance environment and competitive performance either by correlation or experimental design.

2.3 ORIGINAL CONTRIBUTION

2.3.1 Analysis of organisational stress and performance environment

By perusing the literature and research findings of the lines of inquiry salient to organisational issues in elite sport i.e., organisational stress in athletes and coaches, and the performance environments in elite sport, there are issues which have arisen and gaps which need to be addressed (see Appendix 1).

2.3.2 Theory and application

The information provided by the organisational stress perspective is heavily reliant on Lazarus' transactional stress theory, whereas the performance environment perspective is heavily focused on the practical aspects of organisational factors influencing football performance. Following the traditional linear scientific process that moves from theory into application, organisational stress research into sport continues this progress. Practical applications will provide a valuable aid for sports practitioners in their work (Fletcher & Wagstaff, 2009) but also promote efficient sport organisational environments similar to the applied discipline of organisational psychology. However, there is a lack of well-designed measurements and interventions that capture organisational functioning alongside well-being and performance (Fletcher & Wagstaff, 2009). Furthermore, the focus of the research predominantly lies in the understanding of the theory's components and their relationships in sport, with little application research to date. In contrast to this, the performance environment literature has purely focused on applying the organisational perspective to sport using measurements and interventions in football. However, there has been a jump from identifying factors that influence performance to interventions, with a lack of understanding of the theoretical reasoning behind why and how organisational factors influence performance. Additionally, with the potential of commissioning bodies influencing the research findings, it could be beneficial to explore the football environment from an independent standpoint.

The thesis will attempt to bridge the gap between organisational stress theory and the practical application of the performance environment in football by first exploring organisational stress theory in football and then applying these findings using relevant measures in football. Implications for practice will be discussed as a result of the findings from each study.

2.3.3 Conceptual issues

Organisational stress and the performance environment have highlighted a need to clarify what constitutes the organisational environment in elite sport (Fletcher & Wagstaff, 2009). For example, within the overall performance environment of Pain and Harwood (2008), planning and organisational variables

had the least impact for players. Fletcher and Wagstaff (2009) disagreed with this finding and indicated that factors such as training facilities, role understanding and nutrition influence performance. Alongside this and the aforementioned origins of stress in sport i.e., factors directly related to sport organisation are organisational stressors; factors directly related to sport performance are competitive stressors; and factors not directly related to the sport organisation and performance could be considered as personal/life stressors and not organisational stressors (Fletcher et al., 2006; Mellalieu et al., 2009; Nicholls et al., 2009; Woodman & Hardy, 2001); there seems to be some debate regarding what stressor categories the factors influencing sports performers fall into. This is complicated even further with the performance environment definition which seems to be a subcomponent of competitive stressors which connects factors that are organisationally related to competition performance. Research (e.g., Fletcher & Hanton, 2003; Jones, 2002; Mellalieu et al. 2009; Woodman & Hardy 2001) assumes that these types of stressors are appraised differently and can give rise to various forms of stress. Fletcher and Wagstaff (2009) believed conceptual precision is critical for the development and application of robust measures within organisational psychology in elite sport and for the use of specific interventions to manage negative stress outcomes.

The thesis will attempt to provide a clearer conceptual definition of stressors and the relationships these have on the stress process. This will be achieved by discussing the stressors identified and which origin of stressors they belong to; ascertaining different components of the stress process and issues relating to stressors; and suggesting future directions to develop conceptual precision and robust measures of organisational stress in elite sport.

2.3.4 Rationale

Overall, this chapter provides a foundation for the remainder of the thesis. Specifically, the concepts, definitions, theories and analysis outlined in Chapter One and Two can underpin and guide both the design of studies and the contribution to original knowledge in the following chapters. Following the chronological layout of research into the organisational perspective can inform the research into the identification of organisational stressors in academy football (see

Chapter Four). In addition, some of the methodological issues will inform Chapters Five and Six (e.g., longitudinal studies across a sport season).

2.3.5 Aims and objectives

- To interpret adolescent players' and coaches' perceptions of football academy status 1-3 environments within the youth development phase since the introduction of the EPPP (Study 1).

  The specific objectives are to:

  1. identify and compare the organisational stressors of adolescent players within the youth development phase of academy status 1-3 environments since the EPPP.

  2. identify and compare the organisational stressors of coaches within the youth development phase of academy status 1-3 environments since the EPPP.

- To explore adolescent players' and coaches' organisational stress experiences (stressors, appraisals, emotions) of football academy environments within the youth development phase across a season (Study 2).

  The specific objectives are to:

  1. identify and examine the organisational stressors reported by adolescent players across a season.
  2. identify and compare the perceived control of stressors (appraisals) reported by adolescent players across a season.
  3. identify and examine the explanations (appraisals) of the reported stressors by adolescent players across a season.
  4. identify and examine the emotions associated with the reported stressors by adolescent players across a season.
  5. identify and compare the perceived intensities of emotions reported by adolescent players across a season.

6. identify and examine the organisational stressors, perceived controllability, associated explanations, emotions, and emotion intensities of coaches across a season.

- To explore adolescent players' situational properties of organisational stressors, emotion and recovery-stress of football academy environments within the youth development phase across a season (Study 3).

  The specific objectives are to:

  1. identify and compare the organisational stressors frequencies, intensities and durations (situational properties) encountered by adolescent players across a season.

  2. identify and compare emotions felt by adolescent players over a season.

  3. identify and compare the recovery-stress adolescent players experienced across a season.

The thesis will contribute to knowledge by exploring organisational stress adolescent players and coaches experience within elite football academies. Further, this research will contribute to knowledge regarding organisational stress changes of adolescent players and coaches throughout a season within elite football academies, specifically in the youth development phase. This will contribute to understanding of what organisational stress adolescent players and coaches face within the sport context.

Chapter Three

OVERVIEW OF METHODOLOGY

This section will provide an overview of the methodology by discussing the methodological framework and the use of mixed methods research to address the aims of the thesis.

3.1 METHODOLOGY

Methodology is underpinned by philosophical and theoretical ideas from which data collection and analysis methods emerge (Finlay & Ballinger, 2006). The following chapter will identify the methodology underpinning this PhD.

3.2 RESEARCH PARADIGM

This research is based on the paradigm of pragmatism.

3.2.1 The emerging paradigm

A paradigm is a “set of beliefs…a worldview that defines for its holder, the nature of the “world”, the individual’s place in it, and the range of possible relationships to that world and its parts.” (Guba & Lincoln, 1994, p. 107). At the general level there are four paradigms: post-positivism, critical realism, interpretivism (constructionism) and critical participatory inquiry which guide action.

Post-positivism responds to the ontological question by adopting subtle realism. It is assumed there is an external reality independent of knowledge of that world. The paradigm is driven by mechanisms where consciousness can never be fully comprehended and attempts to formulate rules to control and predict reality as best as possible (Smith et al., 2012). Theory-free knowledge is the goal. In regard to the epistemological question, post-positivism adopts a modified dualist/objectivist approach. The assumption is that the researcher and research

area are independent, the researcher can study the area without influencing or being influenced by it and ‘true objectivity’ can be achieved if the researcher is detached (Smith et al., 2012). Post-positivism sees dualism as not possible to maintain but objectivity remains an ideal where findings that are replicated are probably true. Research emphasises well-defined concepts, controlled conditions, precise instrumentation, and empirical testing (Guba & Lincoln, 1994). Post-positivism is judged appropriate for the study of questions requiring systematically gathered and analysed data from representative samples (Bunkers et al., 1996), specific interventions and predictive theories for populations (see Smith et al., 2012). Overall, the paradigm seeks to falsify hypotheses and establish probable truth (Maguire, 1987). However, the paradigm neglects the whole person and represents probabilities about human phenomena (Pearson, 1990).

Critical realism responds to the ontological question in the same way as a post-positivist. However, in regard to epistemology critical realism believes that knowledge is socially constructed (subjectivist) where the researcher and researcher area cannot be separated (Denzin & Lincoln, 2011). It leverages elements of positivism and interpretivism to provide new approaches to developing knowledge (Bhaskar, 1998) and moves beyond describing the social world to explain deeper causal powers that shape observations (Emmel et al., 2018). However, there is not one unitary framework, there are various beliefs that exist between critical realists and so researchers find it difficult to locate recommendations for how to do this type of research (Wynn & Williams, 2012).

Similarly, interpretivism supports a subjectivist epistemology, yet differs from critical realism and post-positivism in terms of ontology. Interpretivism believes in an internal/relativist reality. The interpretivist accepts there is an independent world, yet the mind plays an important role in constructing of social reality (Smith, 1989). Researchers can gain the complexity of a unique context rather generalising for the whole population (Cresswell, 2007). Overall, the paradigm articulates the voices of research participants (Benner, 1994) and seeks understanding with meaning (Allen & Jensen, 1996). However, it may ignore ecological, historical and risk factors (Gortner, 1993), losing the ability to discriminate patterns essential to humans (Allen, 1985) and limits theory as the human state is not objectified outside the lived experience (Gortner, 1993).

Critical participatory inquiry adopts a subjectivist epistemology with some committing to a dualist/ objective ontology and others to an internal/relativist view. Social reality is more than the way people perceive their situation, it is also shaped by historical, economic, and material conditions (Smith et al., 2012). These conditions also affect the ideas of individuals so reality may be a consequence of various ideological processes. Researchers adopt a moral, political standard to judge the situation with consideration of social, political, economic, and cultural context for specific research events (Hammersley, 2013). The paradigm allows exploration and solving of contemporary issues of today's social contexts and helps identify, contest, and solve power imbalance in society (Taylor & Medina, 2013). However, in educational research the actionable role of this paradigm is challenging, and it is not easy to observe changes as it may take time to reflect on action in reality (Pham, 2018). These same issues could apply in other research areas with similar characteristics.

Paradigms have benefits and limitations based on their own ontological and epistemological grounding which can contribute to knowledge and understanding (Smith et al., 2012). The intention of this research programme is to further knowledge and understanding of the perceptions and experiences of players and coaches. Specifically, the subject area of 'organisational stress within different category elite academy football clubs' to be explored from the perspective of the participants within the sport setting. The information is personal and subjective suggesting that the research would be best informed by a qualitative approach (interpretivism). However, there were theoretical aspects which were objective and provided a more in-depth look at organisational stress theory. Furthermore, to bridge the gap between organisational stress theory and practice using quantitative methods is suitable within football environments (post-positivism). It became apparent that a mixed methods PhD thesis would allow organisational theory within the practical academy football environment to be explored more widely and effectively. This supported the recommendation of Fletcher and Wagstaff (2009) for scholars to design experimental studies of organisational influences in elite sport. The development of a research proposal on a pragmatic (mixed methods) paradigm transpired; the primary data sourced was qualitative and this was supported by quantitative information and explored further.

3.2.1.1 Mixed methods research: Pragmatism

Arguments against integrating qualitative and quantitative methods take the position that the two underlying paradigms are so different that any reconciliation between them is bound to destroy the epistemological foundations of each. It is impossible to convince a reader of extreme views that the other end of the continuum is right. If paradigms are incommensurable this could suggest that research with a different philosophy to the one held may be invalid. Surely this might limit knowledge and understanding by doctrinaire adherence to one paradigm in research. How is it possible to know in reality which paradigm best understands the universe? Traditionally, research questions were aligned to either one of the methodologies. Although this can be true for certain questions, some researchers (e.g., Hammersley, 2004; Morgan, 2014; Silverman, 2011) suggested there are other questions which benefit from using both traditions to inform the design and proposed a different methodology: pragmatism.

As well as qualitative and quantitative methods having certain strengths that can be used to compensate for the other's weakness; pragmatism is a flexible approach which considers the aims and contexts of the research and aligns itself to the question rather than a defined philosophical stance (Morgan, 2014). It is simply not choosing which one but how to address the aim by combining methodologies to produce more effective evaluation strategies. Rather than competing contradictory approaches a mixed method approach (pragmatic) allows the application of multiple methodologies to explore the wider perspective (Ritchie, 2013).

3.2.1.2 Philosophy of pragmatic research

Pragmatists argue there is no single reality and no way for researchers to determine which theory is closer to the truth than others (Giacobbi et al., 2005). Reality occurs independently of human experience although it is encountered through human experience. Thus, knowledge concerning the world is a social (rather than a metaphysical) construct. Research findings are based upon social, practical, and moral consequences in addition to their bearing on the human condition (Giacobbi et al., 2005). It could also be that reality is not influenced by

human experience. Therefore, by compartmentalising paradigms there is a chance of missing key research into reality.

Although qualitative and quantitative research may be considered metaphysically incompatible by some researchers (e.g., see Guba, 1990), pragmatists resolve this and advocate integrating findings through assumption of mutual relevance to answering a research question (Teddlie & Tashakkori, 2011). It is the research question which drives the methods used. Knowledge is not an external reality but one of several ways of considering social research and should be assessed on the methods and range of actions that it makes possible (Morgan 2014; Richie et al., 2013).

3.2.1.3 Pragmatic research and sport psychology

According to Brustad (2008) and Gilbourne and Richardson (2006) positivism has been the dominant influence on the stylistic framework around which most sport psychology is grounded. Despite this, there has been a growth in qualitative methods to research participants experiences and understanding within the sport setting (Moran et al., 2011). However, while the limitations of quantitative research designs can strengthen the appeal of qualitative approaches, such as in-depth information, qualitative research in sport psychology has been criticised for a lack of attention in validating its methods (Sparkes, 1998).

Mixed methods research designs have received growing attention in sport and exercise psychology (Sparkes, 2015). Between 2000-2009, 57 articles using mixed methods were present in three well-known sport and exercise psychology journals (Culver et al., 2012). Of these, 10 used systematic observations with interviews, 23 used tests and interviews, and 25 used open-ended questions within a survey or test. Moran et al. (2011) proposed mixed methods research has a lot to offer sport and exercise psychology. Proponents of mixed methods research designs offer several advantages (Greene et al., 1989; Horn, 2011, Moran et al., 2011). These can include (a) triangulation, the use of different methods to seek corroboration of a meaning (Flick, 2004); (b) complementarity of findings from one method by the other (e.g., Rose & Parfitt, 2007); (c) development from one phase of research to inform the development of methods for the following phase, such as qualitative methods being used to develop

psychometric instruments (e.g., Lonsdale et al., 2008); and (d) initiation allows a more complete and comprehensive picture to emerge and access new insights into a particular phenomenon (e.g., Pereira et al., 2010).

3.2.1.4 Pragmatic research design: Integrating qualitative and quantitative approaches

Pragmatic research methodology supports the use of mixed methods research. Morgan (2014) suggested the construction of a research design must address the underlying premise of the paradigm by linking the methods so one method enhances the effectiveness of the other. This can be achieved by the advantages (a-d) in Section 3.2.1.3 above.

It is important to optimally integrate quantitative and qualitative findings in a valid and effective manner (Moran et al., 2011). Integration involves the extent to which the components of mixed method research are related to each other or independent of each other (that makes them parallel in nature). A tendency is for research to report the quantitative and qualitative findings in parallel (Bryman, 2006). The barriers perceived to inhibit integration are different audiences, methodological preferences, skill specialism, lack of exemplars, publication issues, nature of data, bridging ontological divides, role of timelines, and structure of research projects (Bryman, 2006).

The integration of mixed methods in this thesis uses a triangulation and initiation approach. In terms of triangulation, the two methodologies are used equally and the results will be used to cross-validate the thesis findings. The results from each study method will be analysed separately and then it will be devised if the results from each method suggest the same conclusion. If they do, confidence in the results and conclusion is strengthened, otherwise an understanding why not is determined. Furthermore, the initiation of mixed methods allows a more comprehensive insight into elite football academies from an organisational perspective.

3.3 OVERARCHING METHODOLOGY

This is a mixed methods explorative research which uses qualitative and quantitative data in a multiphase design in order to address the overall purpose of the study. It will first explore the players' and coaches' organisational environments of different elite category 1-3 academy football clubs in England. Context will be initially obtained through qualitative method and quantitative data will then be used to provide an alternative perspective in the applied sport setting. Going beyond Study 1, Study 2 provides information regarding the extent and magnitude of the impact of those factors comprising the football academy environment. Factors may be identified in Study 1 but the extent of the issue will be unclear. Study 2 will try to reveal what happens across a season. It builds upon different facets of organisational stress qualitatively and quantitatively. Study 2 will contribute to Study 1's findings by identifying and comparing additional aspects of the organisational stress process (i.e., stressors, appraisals and emotions) over a season. Study 2 will build upon Study 1 by focusing on specific components identified in Study 1, corroborate or differ from Study 1's findings and provide further qualitative and introduce quantitative analysis. Study 2 will also begin to focus on the same components of the stress process with coaches. Results from both studies will provide a greater understanding of organisational stress within football academy environments, although Study 3 will contribute further by identifying more aspects of the organisational stress pathway (i.e., stressors and their situational properties, emotions and recovery-stress) within elite academy youth development phase environments at the beginning, middle and end of the season of players quantitatively. Findings from Study 3 will corroborate or differ from Study 1 and 2, thus accessing new insights into elite football academies. Using a mixed method approach will provide a more comprehensive perspective of organisational stress within elite football academy environments.

3.4 CHARACTERISTICS OF QUALITATIVE AND QUANTITATVE RESEARCH METHODS

Research methodologies are generally based on the one of the two paradigms: positivism/post-positivism and relativism/constructivism. Quantitative

research methods are generally supported by the positivist paradigm whereas qualitative methods are by the relativist/constructivist paradigm (Ritchie et al., 2013). The key to positivism is that the research detaches from the process and distances themselves from the participants and social phenomenon they are studying (Steckler et al., 1992) The researcher is an independent observer who objectively records data obtained. Quantitative research methods comprise scientific approach using experimental and quasi-experimental designs to collect numerical data (Steckler et al., 1992). Quantitative methods are valid and produce reliable outcome data. After which appropriate statistical techniques are employed to determine if and to what extent predetermined study “variables” are related. This approach will either support or refute an already constructed hypothesis (Robson, 2002). The findings then usually can be generalisable to a larger population.

In contrast qualitative methodology is interpretive. The participants’ world is discovered during the interaction between the researcher and the participants, and then interpreted by means of a qualitative method (De Vos, 2002). It is a subjective approach used to explore life experiences and give them meaning within a context (Burns & Grove, 2003). The emphasis is on the role of language through which the world is represented and constructed. The researcher is part of the research process and integral to the construct (Ritchie et al., 2013). To ensure academic rigour, the researcher must acknowledge and reflect on their own effect within the research process. Concepts are generated from rich data, the process is hypothesis generating not testing (Robson, 2002). The findings are ungeneralisable to a large population since qualitative methods are a vehicle for treating research methods that resist simple classification and establish meaning (Giorgi, 1992; Sandelowski, 2010).

Sport psychology practice within football is based on underpinning commonalities and “techniques” but these are delivered at the athlete and/or sports member level. Practice questions may be best informed by considering both qualitative (inductive) and quantitative (deductive) assessment (Creswell, 2009; Robson, 2002).

3.5 FACTORS INFLUENCING THE RESEARCH METHODS SELECTED

By reviewing existing literature examining organisational stress within a new area of sport, identification of organisational stressors is the initial phase (see e.g., Olusoga et al., 2009). Within youth football, there is limited research investigating organisational stress (Pain & Harwood, 2007). This is especially important since the EPPP was introduced in 2011 to provide optimum development environments in order to increase the number of home-grown players participating with English elite football (The Premier League, 2011).

From a transactional perspective, organisational stressors are part of a dynamic stress process (Lazarus & Launier, 1978). The responses to a combination of stressors are likely to be complex. The exploration of players' and coaches' responses to stress and the effects of stress is vital in developing understanding of their overall stress experiences within elite academy environment over a season. In previous research, organisational stress components have been captured using qualitative methods (e.g., identifying stressors, appraisals and coping techniques; e.g., Dixon & Turner, 2018) and quantitative methods (e.g., stressor dimensions, coping and emotions; e.g., Arnold et al., 2017).

Therefore, the methods selected needed to be able to:

- Provide contextual basis for the identification of organisational stressors within academy football
- Provide contextual basis for the exploration of organisational stress components within academy football over a season
- Provide means of exploring the scale of organisational stress components within academy football over a season

It was apparent that this involved contextual information regarding players' and coaches' perceptions and experiences, and this suggested a qualitative approach to identify stressors (Study 1 and Study 2), appraisal (Study 2) and emotions (Study 2). In order to present rich findings about lived experiences of the organisational stressors within an academy environment, this could be met by thematic analysis of data collected through semi-structured interviews. In order to collect and explore participants' experiences, thoughts and feelings within the

context of academy football, qualitative data were collected by open-ended questions within a diary.

It was also important to collect finite characteristics related to the components of organisational stress. These data could be documented and comparisons and relationships between them could be investigated using quantitative methods. A decision was made to use quantitative aspects within the diary (Study 2) because this permitted the scale of organisational stress components to be measured. Diaries allow a large amount of information to be collected in a less invasive, time consuming manner than interviews, which is essential within elite football club environment. In order to present a more in-depth look at organisational stress components, a decision was made to use already established psychometrics to provide valid and reliable quantitative data.

The research aim is to examine organisational stress upon adolescent players and coaches within elite academy environments. This was divided into three parts: the aim of the first phase was to interpret adolescent players' and coaches' perceptions of the football academy status 1-3 environments within the youth development phase since the EPPP. This was addressed using semi-structured interviews for the participants to describe their perceptions of the academy environment and the areas they deem important.

The second part of the study explored more components of the organisational stress process alongside a more detailed look at organisational stressors over a season. This phase was sequential to phase 1. The aim of this phase was to explore adolescent players' and coaches' organisational stress experiences of football academy environments within the youth development phase across a season. This focussed on organisational stressors (identify the organisational stressor experienced), appraisal (identify what caused the stressor and how in control of the stressor was the participant) and emotions (identify the emotion felt from the organisational stressor and how intense the emotion felt) and the change over a season. The identification of organisational stressors, appraisal and emotions were collected qualitatively and the 'how much' appraisal and emotion were collected quantitatively.

The final phase of the research investigated additional components of the organisational stress process alongside building upon Study 2's findings. The aim of this phase was to explore adolescent players' situational properties of organisational stressors, emotion, and recovery-stress of football academy environments within the youth development phase across a season. It is important to establish valid and reliable data when using quantitative methods. Therefore, by using already established psychometrics to build upon the quantitative data collected in Study 2, the focus of Study 3 was to identify organisational stressors and their dimensions, emotions and recovery over a season using standardised inventories already used in sport.

Overall, the sequential phases flow by Study 2 building upon Study 1 findings, and by Study 3 building upon Study 1 and 2's findings to produce a corroboration or difference in findings using different methodologies in order to provide a more in-depth look at organisational stress within an increasingly popular research topic of elite football academies (see Figure 3).

3.5.1 Interview based studies

Interviews are regarded highly within qualitative research methods by generating descriptive information detailing the interviewees' perspective of the research area (Richie et al., 2013). The semi-structured interview is a frequently used method in qualitative research (Biddle et al., 2001). It is proposed that semi-structured interviews are a mid-point between structured interviews (asking all participants the same questions) and unstructured interviews. Structured interviews could reduce the chance of capturing experiences (Dale, 1996) and viewing the data as authentic and accurate without considering context and interaction (positivist paradigm). Unstructured interviews could lose focus as there is no guide for participants to respond to and risk the interpretation of the data as a full authentic description of participants life (emotionalism) or only true within the reality of the interview (constructivism). Semi-structured interviews can explore experience by the extensive use of elaboration and confirmation probes (Biddle et al., 2001; Vazou et al., 2005). As a result, semi-structured interviews will determine the participant's opinions and ensure responses obtained are as consistent as possible in terms of depth and complexity (Patton, 1990). Consequently, every interview can be different from each other (Dale, 1996). The

data generated within the specific interaction of semi-structured interviews will be meaningful beyond the immediate context (Ritchie et al., 2013).

3.5.2 Diary based studies

Bolger et al. (2003) described diaries as “self-report instruments used repeatedly to examine ongoing experiences [that] recognise the importance of the contexts in which these processes unfold” (p.580). Researchers (e.g., Lazarus, 1999) have suggested a need for more descriptive exploratory work to help provide a foundation for understanding the complex person-environment interactions. To capture the dynamic nature of organisational stress, alternative methods to psychometrics are required (Didymus & Fletcher, 2012). It is necessary to detail the explanatory, descriptive nature of the organisational stress process before using psychometrics (see Somerfield, 1997).

The benefits of using diaries to examine organisational stress processes have been emphasised by sport psychology research (e.g., Didymus & Fletcher, 2012; Hanton et al., 2012; Holt & Dunn, 2004). Longitudinal designs using daily diaries is an important method for identifying specific changes in the stress process (Holt & Dunn, 2004). Such an approach emphasises phases of time variations capturing the sequential and dynamic environment in which people operate and the meaning they ascribe to this. This results in an intensive monitoring of phenomena (see Hanton et al., 2012). These techniques are essential for the study of stress and emotions (Lazarus, 2000) and reduce the limitations of retrospective recall associated with interviews (Didymus & Fletcher, 2014). Diaries can also allow a large amount of data to be collected over a period (Didymus & Fletcher, 2014).

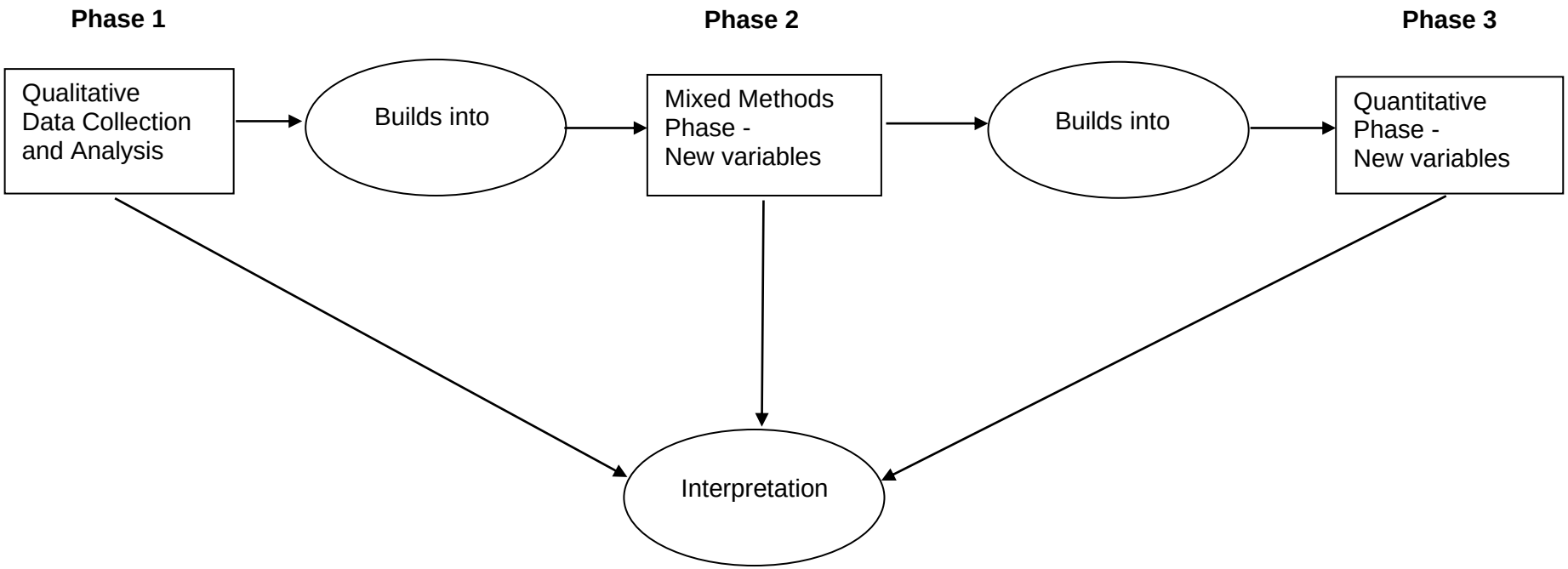


Figure 3. Exploratory sequential PhD design (adapted from Cresswell, 2016)

3.5.3 Thematic analysis

To identify which research approach can answer the research question (Streubert-Speziale & Carpenter, 2007), conceptual and methodological decisions need to be made in order to produce evidence of quality (Hoye & Severinsson, 2007; Polit & Beck, 2003). Since the first study is investigating a new aspect introduced into an environment (organisational stress in a football academy environment post EPPP) and the second study is in part providing rich qualitative data, thematic and content analysis are robust approaches for conducting an introductory study on a novel phenomenon (Vaismoradi et al., 2013). Thematic analysis is preferred to content analysis for study 1 due to its flexibility and application across a range of theoretical and epistemological approaches, as well as provision of a rich detailed account of the data that is purely qualitative (Braun & Clarke, 2006). Thematic analysis is a widely used method for "…identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79).

Thematic analysis epistemology can be a contextualist method sitting between essentialism and constructionism which acknowledges that the way participants make meaning of their experience and is influenced by broader social context whilst focusing on the limits of 'reality' (Braun & Clarke, 2006). It can also be a constructionist method examining the ways experiences and meaning are the effects of discourses operating within society. Thematic analysis can be a realist or essentialist method reporting experiences, meanings and the reality of participants. Braun and Clarke (2006) stated the importance of researchers to state the theoretical position of thematic analysis in their work. This section lies thematic analysis close to the realist method by theorising experience and meaning in a largely unidirectional relationship (Potter & Wetherell, 1987). However, the role of pragmatism is considered due to the best data analysis method to fit the research question.

Themes within data can be identified either by an inductive or deductive approach (e.g., Boyatzis, 1998). Within Study 1 the inductive approach will be used to identify themes which are strongly linked to the data themselves (Patton, 1990). From the data collected via interview (Study 1), the themes may bear little relationship to the questions asked of the participants and will not be driven by the

researcher's theoretical interest in the area. The process of coding the data without trying to fit it into a pre-existing frame is inductive analysis. In Study 1 the inductive thematic analysis approach will involve reading and re-reading data for any themes related to the research question, without paying attention to the themes that previous research in the area might have identified. Inductive analysis will allow important analysis dimensions to be identified from patterns without assuming in advance what the dimensions will be. Without making prior assumptions allows a richer description and understanding of the interrelationships amongst dimensions to be identified from the data (Braun and Clarke, 2006). However, researchers cannot be free of their theoretical commitments (e.g., organisational stress theory in this PhD). It is unrealistic to assume any researcher has no prior knowledge of the subject area under consideration (Krane et al., 1997). Therefore, various techniques must be employed to capture rigour within studies (see Section 3.8). Deductive thematic analysis, however, tends to be driven by the researcher's theoretical interest in the area and provides a less rich description of the data overall but more a detailed analysis of a part of the data.

Another decision to be made is the 'level' to which the themes are identified, either semantic or latent (Boyatzis, 1998). In keeping with the realist method and inductive approach, the semantic approach is best suited. The semantic approach identifies themes within the explicit meanings of data and not beyond what a participant has said (Braun & Clark, 2006). The organisation of data into semantic content will be interpreted to theorise the patterns and their meanings (Patton, 1990) in relation to previous research in the discussions. The latent level is not appropriate to the philosophy underpinning this research as it starts to identify conceptualisations and ideologies, similar to the constructionist paradigm (e.g., Burr, 1995).

Following the six phase guidelines outlined by Braun and Clarke (2006), thematic analysis will involve transcribing verbatim interviews and re-reading the scripts to enhance familiarity. The researcher will generate initial codes and inductively organise the codes into lower- and higher-order themes. This phase will manually cluster extracts from the transcripts. The guidelines will allow the analysis to keep its flexibility and not become constrained by rules and procedures (Braun & Clarke, 2006, 2020). The phases are as follows:

- Phase 1: data familiarisation and writing familiarisation notes. After data gathering and transcribing verbatim the researcher will immerse themselves in the data by reading the transcripts several times in order to obtain the sense of the whole (Polit & Beck, 2003).

- Phase 2: systematic data coding. The researcher identifies codes, in this research programme the most basic semantic content feature of the data that can be assessed in a meaningful way. The codes are organised into meaningful groups (Tuckett, 2005), these differ from the themes which are broader. Coding will be done manually, and the focus will be more data-driven to coincide with inductive thematic analysis.

- Phase 3: generating initial themes from coded and collated data. The researcher sorts the different codes into potential themes. This is the stage when considerations are made regarding the relationship between codes and main overarching themes (Braun & Clarke, 2006).

- Phase 4: developing and reviewing themes. The researcher refines the themes by first reviewing at the level of the coded data extracts. All extracts for each theme must be read and form a coherent pattern. If not, the theme needs to be reworked, or create a new theme or find a home for the extracts that do not fit the existing theme or discard them from the analysis. If the extracts form a coherent pattern, the researcher goes on to consider the validity of the individual themes and whether the accurately represent the meanings evident in the data set as a whole (Braun & Clarke, 2006).

- Phase 5: refining, defining and naming themes. The researcher identifies the essence of each theme and any sub-themes. The theme should not be too diverse and complex but identify what aspect of the data each theme captures and why (Braun & Clarke, 2006).

- Phase 6: writing the report. The researcher will write up the report in a way that convinces the reader of the rigour of the analysis. The analysis will provide a concise account of the themes and the analytic narrative should illustrate an argument in relation to the research question (Braun & Clarke, 2006).

3.5.4 Content analysis

To answer the research question, methodological decisions need to be made in order to identify the most appropriate research approach for producing quality evidence (Hove & Severinsson, 2007; Polit & Beck, 2003). Since the Study 2 is in part providing rich qualitative data, thematic and content analysis are robust approaches for conducting an introductory study on a novel phenomenon (Vaismoradi et al., 2013). Content analysis is preferred to thematic analysis for Study 2 due to the possibility of analysing the data qualitatively and quantifying the data (Gbrich, 2007). Content analysis is a systematic coding and categorising approach used for exploring a vast amount of textual information (Mayring, 2000, as cited in Vasimoradi et al., 2013). The analysis determines trends, patterns of words, frequency of words, their relationships, and the structures of communication (Mayring, 2000, as cited in Vaismoradi et al., 2013). It begins by breaking downs the text into small units of content and submitting them to descriptive treatment (Sparker, 2005). It is used in Study 2 for conducting exploratory work into an area where not much is known and is suitable for identifying common features in data (Green & Thorogood, 2004).

Content analysis is underlined by communication theory as a way to address the issue of interpretation (Graneheim & Lundman, 2004). It also takes a 'factist' perspective in which data is assumed to be more or less accurate (Sandelowski, 2010). The understanding of the philosophical starting points within the data analysis process should not be forgotten when implementing analysis approaches (Bondas & Hall, 2007). Therefore, taking into consideration the philosophy of the thesis, the role of pragmatism allows the best data analysis method to fit the research question in Study 2 and the consideration of coaches i.e., content analysis.

Categories within data can be identified in either an inductive or deductive way (e.g., Boyatzis, 1998). Similar to study 1, within the descriptive sections of Study 2 the inductive approach will be used to identify themes which are strongly linked to the data themselves (Patton, 1990). See Section 3.5.3 for further rationale for inductive theming. However, for the emotion section of the diary deductive content analysis will be used to compare to categories used by Lazarus (1999). A deductive approach tends to provide a less rich description of the data

overall but a more detailed analysis of a part of the data (Braun & Clarke, 2006). For the emotional descriptions in Study 2 and the consideration of coaches, deductive thematic analysis is used, driven by the researcher's theoretical interest in the area (e.g., Lazarus stress theory), allows for comparison to the underlying theory of the thesis and previous sports research using Lazarus' (1999) 15 identified emotions.

The researcher who has an understanding of the context (see Section 3.7) constructs the text to make sense allowing them to answer the research question (Krippendorff, 2004). Content analysis in the thesis does not count the frequency of codes to find significant meanings as it will miss the context (Morgan, 1993) but applies the context first to meanings and counts the frequency of themes for a comparison between different phases of the season. Therefore, the meaning is not removed from its context (Vaismoradi et al., 2013). By having context, it will allow to take into consideration frequency indicating greater importance and the reflection of participants' ability to talk at length about a theme (Shields & Twycross, 2008).

Following the guidelines outlined by Elo and Kyngas (2008), content analysis will involve writing up verbatim the qualitative sections of the diary in Study 2 into scripts and re-reading the scripts to enhance familiarity. The researcher will generate initial codes and inductively organise the codes into lower- and higher-order themes. This phase will manually cluster extracts from the transcripts. The guidelines will allow the analysis to keep its flexibility and not moving from one phase to another, but be recursive with frequent reviews (Vaismoradi et al., 2013). The phases are as follows:

- Preparation: familiarising the researcher with the data. After data gathering and writing up verbatim the researcher will immerse themselves in the data by reading the written data several times in order to obtain the sense of the whole, selecting the unit of analysis, and deciding on the analysis of manifest content or latent content. Similar to thematic analysis for Study 1, manifest (semantic) content will be chosen as it refers to the descriptive level of content not the expression (Graneheim & Lundman, 2004).

- Organising: the researcher will begin open coding, collecting codes under subthemes and higher order headings, and comparing the coding together and in relation to the entire data set to formulate a general description of the research topic.

- Reporting: the researcher will report the analysing process and the results through models, conceptual systems, conceptual map or categories, and a story line. It is worth noting, to fall in line with the terminology used for thematic analysis, throughout the thesis the term ‘theme’ will be used for content analysis also.

3.5.5 Quantitative questionnaires

Quantitative research collects numerical data that can be statistically analysed (Robson, 2002). Researchers must be skilled in assessing quantitative outputs reported in research and obtained from instruments in practical settings (Cook & Beckman, 2006). These outcomes can be assessed using scales, questionnaires and ratings that attempt to measure factors such as attitudes, psychological characteristics and beliefs in terms of numbers (Rowley, 2014). For the purpose of the thesis, the questionnaires used will be referred to as psychometrics.

Psychometrics can be devised by the researcher or a pre-existing questionnaire. Pre-existing psychometrics have the advantage of being tested for validity and reliability and the possibility of normative data already being established (Mathers et al., 2007). A big benefit of using psychometrics is getting responses from a large number of participants that become more generalisable (Rowley, 2014). Hence psychometrics can be used to help understand relationships or comparisons between variables. It is also a way of developing overall patterns from data collected (Rowley, 2014).

3.6 RECRUITMENT AND ETHICS WITHIN FOOTBALL ACADEMIES

The use of sport psychology within English football was lacking with only five Premier League clubs in the 2002-2003 season employing a sport psychologist on a contractual basis (Andy Cale as cited in Pain & Harwood, 2004).

Despite the success of sport psychology across different sports including academy football (Johnson et al., 2011), negative associations exist within football and there has been a tendency to resist change. Pain and Harwood (2004) revealed a range of barriers faced by sport psychologists wishing to work within English football. Lack of finance was identified as a barrier to sport psychology and even when working to a limited budget, psychology is generally the first specialisation to be dropped. Knowledge of sport psychology is limited which presents a major barrier to its integration and misconceptions of the nature of psychology were found (e.g., negative connotations of psychology, only for problem players, strong players would not benefit from it, psychology is common sense). Furthermore, the sport psychologist integrating themselves within football must be able to deal with (and have knowledge) of the environment, the 'banter of players', the scepticism of staff and be able to prove their worth to those in football. These range of potential barriers may prevent the successful entry to psychologists within the football academy environment and could transfer to prevent sport psychology researchers also. For example, if an academy has many internal barriers such as if staff are hostile to psychology, this may prevent entry into the organisation.

Due to the barriers of entry and the elite youth environment, football academies could be classed a hard-to-reach population. Hard-to-reach populations are defined as challenging to access due to a specific factor that characterises its members (Faugier & Sargeant, 1997). To ensure a maximum uptake of participants, a researcher must "gain entry" to the environment (Woolway & Harwood, 2019). Gatekeepers are individuals that control the access to the other group members and sources of information (LeCompte & Schensul, 1999). Gatekeepers feel that building a rapport and having good interpersonal skills are prominent for the applied practitioner to enter sport (Woolway & Harwood, 2019). Within football academies, youth academy directors and coaches are gatekeepers for psychologists wishing to gain entry to elite youth football environments (Pain & Harwood, 2004). Hence, to gain entry in recruiting players and coaches for the PhD, the researcher must build a rapport and show interpersonal skills to the gatekeepers as well as overcome the barriers to entry from football academies.

Furthermore, for some clubs confidentiality becomes an issue between the researcher and the gatekeeper. For example, the club would like to know the results of their players. However, upholding individuals' rights to confidentiality is a central tenet of psychological research (American Psychological Association, 2017). Therefore, it is important for the researcher to discuss the limits of confidentiality with the gatekeepers and inform the players and coaches about how their data will be used. For the purpose of this PhD, participants information was only seen by the researcher, and general results of the studies were given as feedback to the clubs participating in the studies. Unfortunately, if the club did not agree with this, then they would not participate in the studies.

There are 92 elite English football clubs in the Premier and English Football League. These clubs have academies either categorised with a 1 to 4 status or do not have an academy. For the purpose of this research programme, approximately 85 of these clubs are category 1-3 status (20 category 1, 21 category 2 and 44 category 3; at the time of writing). Category 4 clubs are disregarded because they only focus on the professional development performance pathway of players. The youth development phase focuses on the development of players from the U12 to the U16s, which equates to potentially five age groups of players. At some academies, age groups of players are combined to produce one age group, for example, the U15s and U16s. There are approximately 20 players in lower age groups and 15 in the higher age groups depending on the academy (n = 90), and so this would total to a maximum of 7650 players being available for inclusion to the research programme. Yet as stated in the introduction (Section 1.2), U12's and U13's were disregarded in the thesis, therefore the maximum number of players available for inclusion is 4250. However, the number of full-time coaches in the youth development phase is severely different. Table 3 illustrates the EPPP's required number of full-time youth development phase coaches and coach to player ratio for the different age groups. Academies can employ more coaches dependent on player numbers, but they do not necessarily need to be full-time. Therefore, there will be a minimum of approximately 126 required full-time youth development coaches for inclusion in the research programme (approximately 40 category 1, 42 category 2, 44 category 3 club coaches).

Table 3. Coach numbers for the youth development phase in category 1, 2 and 3 football academies

Category	Number of full-time coaches	Coach to player ratio	Age group
1	2	1:10 1:8	U12-U14s U15 & U16s
2	2	1:10	U12-U16s
3	1	1:10	U12-U16s

At 16 years old, players are potentially offered an elite scholarship programme into the professional development phase of the academy. This offer usually occurs between December and February in the last age group of the youth development phase. However, players can be released from the club anytime before this. In 2016, category 1 academies reported a high number (65%) of 18-year-olds given initial professional contracts (The Premier League, cited in Conn, 2017a). Although the Professional Footballers' Association found five out of the six players are not playing professional football at 21. This high release of players is also found in the youth development phase where thousands of players leave the academy system every year (Conn, 2017a). Thus, making recruiting a large sample size of players for the research programme, especially for longitudinal studies, difficult.

The range of barriers of entry, gaining entry, confidentiality, sample size and high release of players makes recruiting participants for the studies difficult, precluding for example, participants in category 2 in Study 3. Due to Study 3 being a longitudinal study, once the second phase (mid-season) data collection began, the window had closed for category 2 players recruitment. All players needed to complete all three phases of data collection for Study 3. In addition, the sample size for statistical analysis comparing category players at three phases of the season was not large enough. The limited sample size and the potential of the low number of coaches not filling in all the season's data (reducing numbers even further) would also not allow statistical analysis of all coaches across three phases of the season. Hence, Study 2 was an introduction into exploring stressors, appraisals and emotions across a season of youth development phase coaches.

Sufficient data (see Table 3.1) in line with previous research in the area (see individual studies for further detail) was gathered.

Table 3.1. Number of participating players and coaches in each of the study phases

Study	Players	Coaches
1	36	15
2	30	11
3	16	0

3.7 RIGOUR

Within the quantitative research paradigm for the results to be meaningful, it is important that the outcomes measures used are valid and reliable (Getliffe, 1998). Validity refers to how legitimate the results of a test are for a specific purpose (Cook & Beckman, 2006). Within the PhD thesis, the assessments used attempt to measure underlying constructs (e.g., stressors, control, emotions, recovery) and for the results to have meaning will be only in the context of the construct they purport to assess (Messick, 1995). Traditionally validity has been separated into three types: content, criterion and construct (American Psychological Association, 1966). However more recently it is argued that validity should be conceptualised under one overarching framework of construct validity (McMillan & Schumacher, 2001). This approach reasons that instruments' scores are only useful if they reflect the construct measured and the concepts of content and criterion validity are sourced of evidence within the construct validity rubric (Cook & Beckman, 2006).

Reliability refers to the reproducibility of scores from one assessment to another (American Educational Research Association, 1999). A measurement tool that does not produce reliable scores does not permit valid interpretations (Cook & Beckman, 2006). There are a number of ways to measure reliability (e.g., internal consistency, temporal stability, parallel forms, inter-rater reliability and generalisability theory). Internal consistency measures how well the scores for individual items on the instrument correlate with each other. Temporal stability is

the reproducibility over time, parallel forms is the reproducibility between different versions of an instrument and inter-rater reliability is the reproducibility between raters. Generalisability theory is a unifying framework for all reliability measures and attributes the unreliability to various sources of error (Brennan, 2001). The relative importance will vary according to the instrument type (Downing, 2004).

Both reliability and validity for the quantitative assessments will be included in the methods section for Study 3. Since the thesis adopts organisational stress theory, a questionnaire measuring organisational stressors in sports performers (i.e., OSI-SP, Arnold et al., 2013) was used for players' data collection. However, there is no organisational stressor questionnaire for sports coaches and so no equivalent coach study for Study 3 was carried out. Previous research (Larner et al., 2017; Wagstaff et al., 2018) modified the OSI-SP to use with sports coaches. However, the OSI-SP was developed and validated with an athlete population in mind. Future research is needed to develop and validate the OSI for other sport populations to aid future research wanting to identify and measure organisational stressors among other key stakeholders operating within sport (Larner et al., 2017). There are other questionnaires present which could be used to measure the environment from a sports coach perspective, such as the Talent Development Environment Questionnaire (TDE, Martindale et al., 2010); however, these questionnaires do not have the conceptual relevance to the variables studied in this thesis.

Within the qualitative research paradigm, the research is part of the process (Ormston et al., 2014). Researchers attempt to limit the influence of their bias, attitudes, values and opinions in order to achieve empathic neutrality and report accurately participants' information (Ritchie et al., 2013). Therefore, it is important for credibility of qualitative research that the researcher states potential bias (e.g., personal background, experiences, values) which may affect their engagement with the data and the research process (Ritchie et al., 2013). The reader can then determine if bias has consciously or unconsciously influenced the conclusions drawn in context (Ormston et al., 2014). The potential bias from the researcher is honoured within the reflexive account of the research personality (see below).

3.8 RESEARCHER POSTIONALITY

Positionality is the position an individual adopts about a research task and its social and political context, and their world view (Rowe, 2014). The world view concerns ontological assumptions, epistemological assumptions and assumptions about agency and human nature (individual's assumptions about the way interactions are made with the environment; Grix, 2019). All of which are influenced by an individual's values and beliefs (Marsh et al., 2018) and reflects the position the researcher has chosen within a research study (Savin-Baden & Major, 2013). Savin-Baden and Major (2013) identified three ways a researcher can identify and develop their positionality. Firstly, acknowledging personal positions that might influence the research; secondly, researchers considering how they and others view themselves; and thirdly, acknowledging the research will be influenced by the researcher and the context.

A strong positionality statement will include a description of the researcher's philosophical beliefs (see section 3.3.1.1 Mixed methods research: Pragmatism), potential personal influences such as, knowledge, beliefs and experience on the research, the researcher's chosen or pre-determined position about the participants in the study (i.e., insider or outsider), and the research context and how, where, when and in what way these have influenced the research process (Holmes, 2020). Below describes the researcher's personal position, the researchers' position about the participants in the study, the research context and the influences of these positions.

Neale (2009) suggested that reflexivity benefits the researcher drawing attention to their personal beliefs and attitudes and the potential effect these can have on the participants and environment being researched. Self-reflection and reflexivity are a prerequisite and ongoing process to construct the researcher's positionality (Holmes, 2020). The reflexive account of the PhD author's influence on the thesis is as follows (written in the first person):

My interest in sport psychology in football developed because of undertaking a Science and Football degree. I believed I would be interested in the physiological aspects of football, but it turned out that the psychological aspects were far more interesting. I found that despite the professionalism and popularity

of English football, there was a lack of psychological support or willingness from football clubs to accept psychology within football.

My interest in football started when I was young. I played in my primary school football team and when there was a lack of a female football team in secondary school, I put my passion into supporting my family team. I had a season ticket from the age of 16 until the age of 33, where I had to give it up due to having children and relocating. Thus, my potential bias may be underlying frustrations towards football clubs from a fan perspective.

From my degree in Science and Football, I continued learning and completed a Postgraduate Diploma in Psychology (to gain British Psychological Society status) and a Masters in Sport Psychology. This deepened and broadened my theoretical knowledge and increased my awareness of research methodologies. I also found the focus was to be upon professional athletes who have 'made it' to a high level, whereas I feel a greater benefit for psychological support would be to developing athletes. A potential bias therefore is the preference for more support to be aimed at developing footballers rather than the focus being on the professional first team players.

After completing my studies, I was employed as an academic tutor teaching seminars and workshops and conducting marking and exam invigilation within a psychology department. I noticed a divide between sports science and psychology, even though psychology is accepted a sports science. Each department were independent of each other. I believe it to be limiting that core psychological theory recognised in psychological degrees are not considered within the sports department and that applying psychology aspects relevant to sport are not considered in the psychology department (like organisational aspects in the workplace or psychology aspects in criminology). An area of bias might be the conflicting pathways and choosing which one is considered 'better' i.e., is it more appropriate to conduct the research following a sports science background specialising in psychology or a psychology background specialising in sport.

Alongside the academic work, I became a teaching assistant in the delivery of BTEC Sport Sciences to football academy scholars within a category 1 football club. I loved working with young players and seeing what the players went through

in their daily lives. It was also interesting to see how different members of staff interacted with each other. A possible area of bias would be a desire to provide evidence that is useful in better supporting players and a need for better interactions between staff.

My experiences of football and psychology led to my interest in completing a PhD to further understand wellbeing within the football academy environments. I entered the research programme in the hope of highlighting positive and negative aspects of the environment, identifying issues for improvement and help change the environment for the better. Luckily a funded studentship examining this area arose and I was successful in my application. I felt it important within the design of the PhD studies to incorporate inductive approaches with open non-directional data collection techniques for the qualitative aspects of Study 1 and Study 2. I did not want my prior knowledge and experience within football academies to bias the findings.

From a researcher perspective as a female entering a male dominant environment, it was anticipated that I would not be accepted being in the environment which in turn would make it harder collecting data. However, when entering the environment, I was made to feel welcome and data collection ran smoothly. For example, during the data collection phases of Study 1, I felt that the participants were very open and honest in their responses during the interviews. Overall, the ease of data collection could be due to the lack of female interaction within the environment or as being an outsider of the club where responses would be kept confidential and not impact on their life inside the football club.

Before data collection took place within Study 1 and Study 3, I welcomed two children. Since becoming a parent I feel have an overwhelming value for children to be supported and looked after. This value may have transferred onto the players attending the football academies, since they are still children. In phase 1, I was aware of the trust that was being placed in me for the players to describe their experiences. My values may have provided a more nurturing approach with players in comparison to coaches. Data analysis could have detailed a greater weight behind player support in line with my values. However, I tried to collect and analyse data impartially. Trustworthiness of data regarding accurately representing

participants' views was provided by the original supervisors checking themes to ensure credibility of the data.

During the semi-structured interviews, it was important to remain objective and not to engage in off-topic discussions or discussions which may influence participants' responses based on the researchers previous experiences. Within data analysis greater weight could be given to participant codes which match the researcher's beliefs. Therefore, it is important that researcher bias is recognised to reduce the risk and that data collection and analysis will be carried out methodically so that no unconscious associations are made. More so for phase 1 and 2, some coaches were colleagues who I worked with prior to giving up work to start the PhD programme. I was aware of how hard and awkward it may be to allow me to interview and open up on their experiences working in an academy environment. However, I tried to remain neutral, remind the participants of confidentiality and ignore any previous information I knew about the participants when collecting and analysing the data.

There may have been a potential bias in recruiting participants for Study 2 and 3. Participants who have taken part in Study 1 and agreed to do further studies may be positively disposed towards them. However, Study 2 and 3 provided no direct contact between researcher and Study 1's participants when gathering data, so no bias could be transferred.

As a researcher who has had two previous dissertations conducting qualitative analysis using content analysis before the thesis, the researcher is deemed a novice in qualitative analysis. I felt there was a lacking a qualitative methodology taught at undergraduate and postgraduate levels to feel confident enough to try new (to me) qualitative data collection and analysis techniques. Therefore, data were analysed following the steps of Braun and Clarke (2006) for thematic analysis and Elo and Kyngas (2008) for updated content analysis. These steps allowed a welcomed approach that detailed the requirements necessary for the data analysis to be appropriate to the research aims.

The subsequent section of the research positionality statement is the researcher's position on the participants. The insider perspective is usually an emic, whilst outside perspective is an etic account. The emic position is situated

within a cultural relativist perspective recognising behaviour in context and relative to the individuals' culture (Holmes, 2020). Prior theories are discarded so a true voice may be heard. The etic position is situated within a realist perspective aiming to be culturally neutral and testing pre-existing theory. It operates on the notion that researchers detach themselves from the prejudices of social groups (Kusow, 2003).

The term insider and outsider also refer to whether a person is an insider or outside to the culture being studied. Merton (1972) defined insiders as members of specific groups or social statuses, whilst outsiders are non-members. Insiders can also be an individual whose personal biography e.g., race, gender, gives a familiarity and prior knowledge of the group. Outsiders do not have any prior knowledge of the group (Griffith, 1998, as cited in Mercer, 2007). There are advantages and disadvantages to which position is taken; for example, an easier to access culture yet unknowingly basis of an insider position and the lack of understanding of culture and external perspective to process as an outsider (see Holmes, 2020). However, much like the philosophical stance of the PhD in between relativist and realist, there may be no clear dichotomy between being an outsider and insider (Herod, 1999). The researcher is not a clear insider or outsider but lies on the continuum (Christensen & Dahl, 1997 as cited in Mercer, 2007). As such, the researcher can be deemed an outsider as they are not a youth player or coach but also an insider as there has been an attempt to disregard the pre-existing theories and the researcher has some prior knowledge of the context. The researcher acknowledges their positionality within the continuum and the ongoing changes as the research process progresses. As such, in Study 1 the researcher presented herself as an outsider when interviewing players and coaches but could use her insider knowledge when using probing questions to gain more in-depth information. At the start of Study 2 and 3 the researcher presented herself as an outsider when collecting data. However, as more contact took place with participants over the studies a change of positionality may be viewed from outsider to insider due to familiarity. Furthermore, within the familiarisation sessions of Study 2, insider knowledge could help explain examples of diary completion. Therefore, it is important to consider the advantages and disadvantages that may influence the data gathering process and interpretation in these situations, in order to become a better researcher (Holmes, 2020).

The final section of the positionality statement refers to the research context and how, where, when and in what way this has influenced the research process (Holmes, 2020). The academy as a context varies from one to the next. Trying to arrange interviews, diary completion and suitable times for psychometric completion with participants involved a lot of negotiations with gatekeepers at respective clubs. This was to ensure time fitted around players' and coaches' academy work. Data collection could result in being late at night, after training, after education all of which could have influenced data collection. For example, participants could have been tired completing interviews and psychometrics. Before each data collection, I tried to make sure all participants were relaxed before completion. Furthermore, for the researcher travelling to the football clubs for data collection in every study involved driving long distances. This became tiring especially during Study 2 when I was pregnant. I allowed plenty of time to arrive early to enable time to relax and prepare for interviews or psychometric help. This would be to ensure a calm manner before data collection. For Study 2, luckily the data collection was delivering or picking up the diaries. It became an issue to drive long distances when pregnant, so my father became the driver with me as a passenger. Therefore, there was no influence of context for Study 2 data delivery or collection of the diaries.

From a research perspective, it was felt necessary to come across approachable in order to ease into the environment and not 'academic' due to the barriers of football (see Section 3.6). Experience of working in a football club environment helped to integrate myself into the environment and liaising with clubs (e.g., gatekeepers) throughout the research process.

Specific to each study, the context could influence the research process in the following ways:

- Study 1 – Academies are busy environments, which may be distracting when conducting interviews. To ensure the least amount of distraction interviews took place in a quiet room (with the door open) and all staff were familiar that interviews were taking place.
- Study 2 – It was important to liaise with gatekeepers to ensure participants completed the diaries daily and were ready for collection. The barriers of

football (Section 3.6) were necessary to overcome by building a strong rapport and trust with the gatekeepers to allow data collection to occur.

- Study 3 – Academy players have a designed timetable to follow. Data collection therefore cannot be time consuming in order to disrupt the timetable or delay players in returning home. The design of the psychometric booklet included the shorter version of the RESTQ-Sport (Kellmann & Kallus, 2001) with 52 items, rather than the 76-item version in order for a quicker completion time to suit academy needs. There is a 36-item version of the RESTQ-Sport, however copyright issues allowed this version to be used 25 times. Hence, this would not be appropriate for a longitudinal study where 16 participants completed the version three times over a season (48 copies).

Chapter Four

STUDY 1

Following reviews of the concepts, definitions and theories in Chapter Two and the future directions to be considered when examining organisational perceptions in academy football among coaches and players, this chapter is an exploratory chapter documenting the first study of organisational stress amongst players and coaches since the EPPP was introduced. The study aims to interpret the adolescent players' and coaches' perceptions of football academy status 1-3 environments within the youth development phase since the introduction of the EPPP. The objective is to identify and compare organisational stressors of adolescent players and coaches within the youth development phase of academy status 1-3 environments since the EPPP.

This study is presented in two parts, addressing the aims and objectives above with the first part focusing upon players and the second focusing upon coaches.

Part A

Players' Perceptions of Different Category Academy Environments within Elite English Football

4.1 ABSTRACT

The purpose of this study was to interpret adolescent football players' perceptions of their academy environments (category 1-3) to gain an understanding of potential stressors since the Elite Player Performance Plan (EPPP) was introduced. Thirty-six youth development phase players aged between 13-15 years from category 1 to 3 English football club academies participated in individual semi-structured interviews. Players were recruited from six English football club academies with EPPP category ratings of 1 to 3. Thematic analysis identified five higher-order themes that characterised the players' perceptions: pressures and expectations, development and opportunities,

balancing act (football and life outside football), interaction and communication with significant academy others, and performing as a football player. Findings imply that the academy environment is multifaceted with a wide range of factors influencing players' experiences. The distance from the players' home to the football academy, football-life balance and home advantage emerged as new factors included with the academy environment. Findings highlight the importance of the Premier League and football clubs to provide appropriate support in dealing the demands placed upon their players.

4.2 INTRODUCTION

Despite the plethora of research examining organisational stress in sport, there is a lack of evidence surrounding the perceptions of adolescent players in association football. Existing research on adolescent players' perspectives of organisational demands in a football academy (Reeves et al., 2009) has revealed mid-adolescent players to experience more demands than early adolescent players, and both groups experienced common (e.g., making errors and team performance) and different demands (e.g., early adolescents: family; mid-adolescents: coaches and contracts). This study has revealed a greater understanding of the demands academy footballers face, but there is a need to pay attention to both positive and negative outcomes to address the imbalance with stress research and practice that has focussed on negative emotions and strain (Folkman, 2008). Furthermore, specific environments within the academy have been created for players' development, which were not taken into consideration in Reeves' et al. (2009) study. For example, the current research builds upon previous exploratory research amongst players by providing a deeper understanding of what affects playing experiences in the youth development phase of academy football.

Developing the next generation of elite football players in England continues to be of importance for the English national side and professional clubs. The Football Association implemented the Elite Player Performance Plan (EPPP) to provide an optimum environment to develop better home-grown players (The Premier League, 2011). Surveys have suggested contradictory results of the

success of the EPPP (CIES, 2014; Conn, 2014) with only one research publication examining the influence of the EPPP. Noon et al. (2015) examined high training loads on perceptions of well-being and physical performance of players. Findings suggested that elite youth football players have decreasing perceptions of well-being and neuromuscular performance yet increasing endurance performance as a season progresses. However, there remains a significant gap in research relating to the investigation of the environment created by the EPPP and its influence on well-being amongst adolescent players.

Thus, the aim of part A of this study was to interpret the players' perceptions of the academy environment within the youth development phase of academy football since the introduction of the EPPP. With the objective to identify and compare the organisational stressors of adolescent players within the youth development phase of academy status 1-3 environments.

4.3 METHOD

4.3.1 Participants

Thirty-six male academy football players were purposively recruited from the youth development phase of English football club academies. The sample comprised of 12 players from two Category 1, 8 players from two Category 2, and 16 players from three Category 3 football clubs. This was in keeping with similar research (e.g., Reeves et al., 2009) where 40 players were recruited. Notably saturation was reached for all players from each category club, whereby the range of thematic factors were identified (see Hennink et al., 2017). Thematic saturation was reached throughout the interviews where no new ideas or themes appeared (Lincoln & Guba, 1985). Players were aged between 13 to 15 years (M =14.08 years, SD = 0.84), and had experience at their football academy ranging from 1 to 9 years (M = 3.89 years, SD = 2.44). Players' positions in a football game consisted of 10 defenders, 22 midfielders and four forwards.

4.3.2 Procedure

Upon institutional ethics approval, academy managers from 59 football clubs were sent details of the study and data collection process via email with an

invitation to their elite youth players to participate in the study (see Appendix 2). Permission was granted from six football clubs and informed consent was sought from the players' parents or guardians and the players from each club (see Appendix 3-5). All interviews were conducted by the principal researcher at the players' respective training facilities and were audio recorded. Interviews ranged from 17-39 minutes. After the interviews, players were given a debrief sheet and one to take for their parents or guardians (see Appendix 7 and 8).

4.3.3 Interview guide

In keeping with research in the area (e.g., Reeves et al., 2009), a semi-structured interview guide was developed to ensure all participants were asked the same set of questions (see Appendix 6). A pilot interview was conducted with an academy football player not included in the sample and enabled the principal researcher to make minor refinements to the interview structure and questions. For example, reframing the order of questions to improve the flow of the interview and the re-wording of questions to improve participant understanding. The final interview guide was divided into three sections. In the first section, introductory questions focussing on demographic information and football experience were asked to facilitate descriptive talking and to build rapport with the principal researcher (Kvale & Brinkmann, 2009). Example questions included 'could you tell me how you got started playing football?'

The second section focused on identifying the organisational stressors associated with being an academy player that were perceived to affect well-being. These questions were designed to not mislead participants' responses into pre-determined categories of stressors as such used by previous research in this area (e.g., Thelwell et al., 2008; Woodman & Hardy, 2001). Deductively formulating interview questions based on pre-existing stressor categories is not appropriate when investigating a new environment. Interview questions needed to be open and formulated from no pre-existing themes in order to reveal all organisational stressors associated with football academy environments. Furthermore, Olusoga et al. (2009), Reeves et al. (2009) and Levy et al. (2009) provided participants with a definition of stress before examining stressors. The use of a definition may result in potential leading and biasing of participant answers. It may be possible the definitions restrict the more detailed responses that the participants could have

provided (Thelwell et al., 2010). Hence no definition was included in the interview schedule. Example questions included ‘what do you find difficult about being a player in an academy football club?’ Questions were adapted from Clarke and Harwood (2014) who explored how parental experiences were influenced by contexts of elite youth football. This research is similar to the PhD as it examines experiences within elite youth but using different participants. By adapting the open questions posed by Clarke and Harwood (2014), the research will try to identify all possible aspects of athletes’ perceptions of being in academy football as it was relevant to them. Probes were used to explore participant descriptions further (e.g., How did you feel about that? How are you finding that?). In the final section, players were given the opportunity to discuss any other relevant issues or expand upon any previous comments.

4.3.4 Data Analysis

The data were analysed using the thematic analysis guidelines produced by Braun and Clarke (2006). Firstly, all interviews were transcribed verbatim by the principal researcher and read and re-read to increase familiarity with the data; individual meaning units were selected from transcripts and were grouped into initial codes. Players’ responses generated a total of 202 codes. These initial codes were inductively sorted into lower- and higher-order themes and reviewed for further definition and refinement of each theme.

4.3.5 Trustworthiness

The study followed a methodology compatible with an interpretivist paradigm to discover the reality through participant’s views (Yanow & Schwartz-Shea, 2011). This fits within the overarching pragmatist paradigm of the research programme as it allows the research to identify players’ and coaches’ perceptions of organisational stressors within academy environments. The interpretivist paradigm uses predominantly qualitative methods (e.g., Willis, 2007). Willis (2007) detailed the rich reports necessary for interpretivists to fully understand contexts were gained using qualitative approaches. Hence the use of semi-structured interviews which generated descriptive information detailing the interviewees’ perspective of the research area (Richie et al., 2013). Semi-structured interviews elicit the participant’s opinions and ensure responses obtained are as consistent

as possible in terms of depth and complexity (Patton, 1990). Data was analysed and interpreted using thematic analysis due to its flexibility and application across a range of theoretical and epistemological approaches, as well as provision of a rich detailed account of the data that is purely qualitative (Braun & Clarke, 2006). In keeping with the realist method and inductive approach, the semantic approach is best suited. The semantic approach identifies themes within the explicit meanings of data and not beyond what a participant has said (Braun & Clark, 2006). Thus, thematic analysis in this study lied close to the realist method by theorising experience and meaning in a largely unidirectional relationship (Potter & Wetherell, 1987). However, the approach for this study lies within the overarching paradigm of the research programme (pragmatism) due to the best data analysis method to fit the research question.

In line with Morse's (2015) strategies for determining rigour in qualitative inquiry, the following techniques were employed to ensure quality of the research: familiarity with the environment, peer debriefing, developing a coding system, and maintaining a research diary. The principal researcher has worked 6 years within a football academy setting before and after the introduction of the EPPP. Having an understanding of the context influencing the participants' data may develop a wider understanding of the participants' experiences (Downe-Wamboldt, 1992). The researcher declared any research bias within the research diary and suspended those biases from the data collection and analysis process (Cresswell & Miller, 2000). When analysing the data, a coding system was developed to capture the meaning of participants' responses following a standardised procedure of coding each interview. Additionally, the technique of peer debriefing was intended to aid development of the study and further prevent researcher bias. Peer debriefing in way of reviews by the supervisory team helped in guidance and challenged the principal researcher's assumptions, methods and interpretations (Lincoln & Guba, 1985). The researcher listened to alternative viewpoints but has taken overall responsibility for the research process and findings. By using techniques to increase research quality, in line with the flexibility of thematic analysis, it has captured systematic procedures for evaluation through the lens of academy players and open to external review (i.e., research diary); critical perspectives that are respectful of the participants studied from an external review (i.e., peer debriefing); and a combination of a contextualised procedure through

the lens of academy players and a critical perspective by the researcher (i.e., environment familiarity). For example, the research diary contained procedures for coding and thematic descriptions; peer debriefing by the supervisory team included critical perspectives that were external from the researcher and the players; and environment familiarity captured the context of the players by the researcher knowing the academy environment.

4.4 RESULTS

In keeping with previous research exploring athletes' perceptions within sport (e.g., Hanton et al., 2005) raw data responses are presented in Figure 4. The results are presented using quotes from the interviewees within the interpretation of data to allow for context. Discussion with players resulted in the establishment of 23 lower-order themes, which were then in turn organised into the following five higher-order themes: pressures and expectations, development and opportunities, balancing act (football and life outside football), interaction and communication with significant academy others, and performing as a football player.

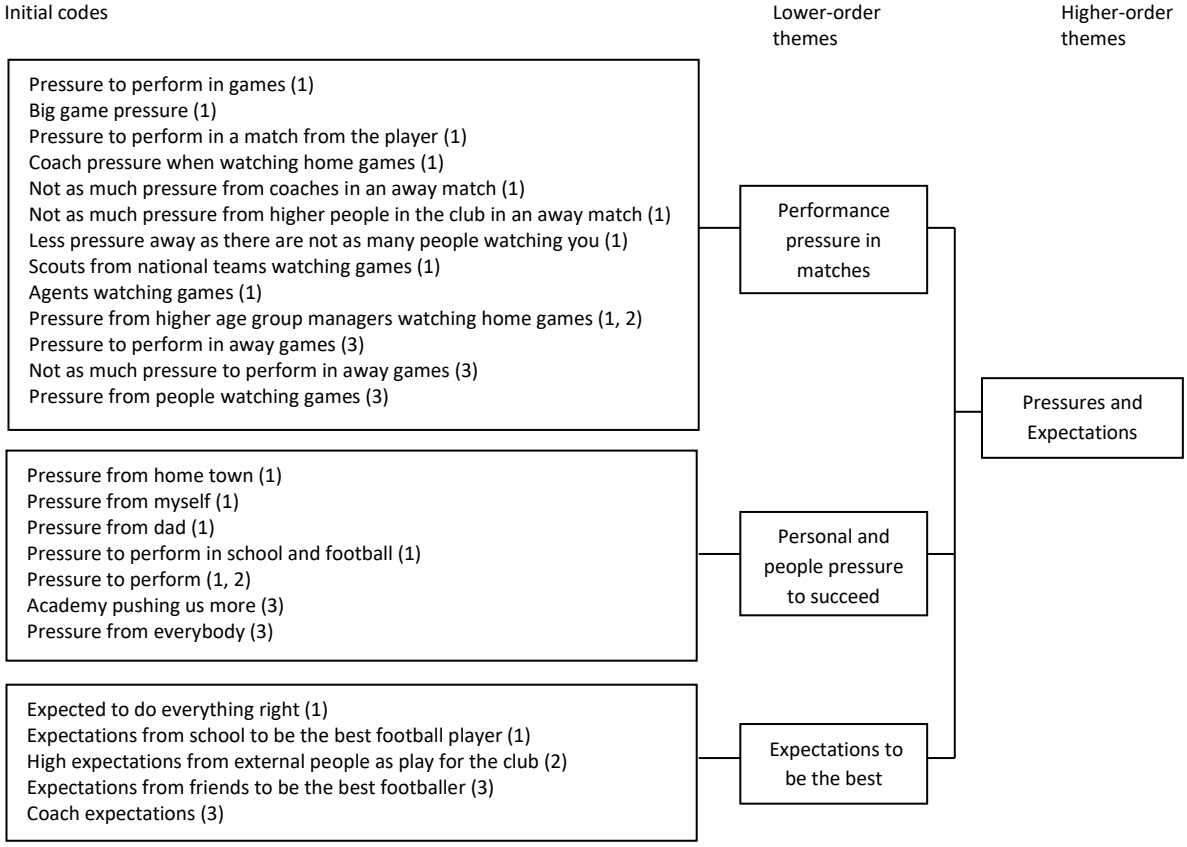


Figure 4. Factors identified by academy football players, whereby 1=category 1, 2=category 2, 3=category 3 players

Pressures and expectations

Pressures and expectations emerged as a predominant theme throughout interviews with all players from different categories of football club. Players mentioned that they felt pressure to perform in football matches. It became apparent that there was a wide range of match pressures placed on category 1 players such as from coaches, players, national team scouts, agents, people higher up in the club, and supporters. An example of the range of category 1 player pressure at a football match is highlighted below:

> "Sometimes if like all the head coaches and that are watching, sometimes you get a bit nervous coz you know obviously want to do well."

Whereas category 3 players differed in their perceptions of the level of pressure to perform in away games, but commonly found pressure resulting from people watching the games; and category 2 players agreed with category 1 players that the presence of higher age group managers watching home games was pressurising.

Moreover, players noted that it was not just pressure to perform in matches, pressure was also present to succeed in and outside of football. A category 3 player summarised the range of pressures upon academy players by the following statement:

> "Just pressure. Just everything. Just from everyone."

As part of the pressures to perform and succeed, players also expressed the high expectations from others to be the best football player. An example of an expectation placed upon a category 1 player is highlighted below:

> "You're expected to do everything right at the same time as like just but at the boys club you can just like if you do stuff wrong like oh right it's only like a Sunday league match but here it's like a proper big match and there's more expected of you."

Development and opportunities

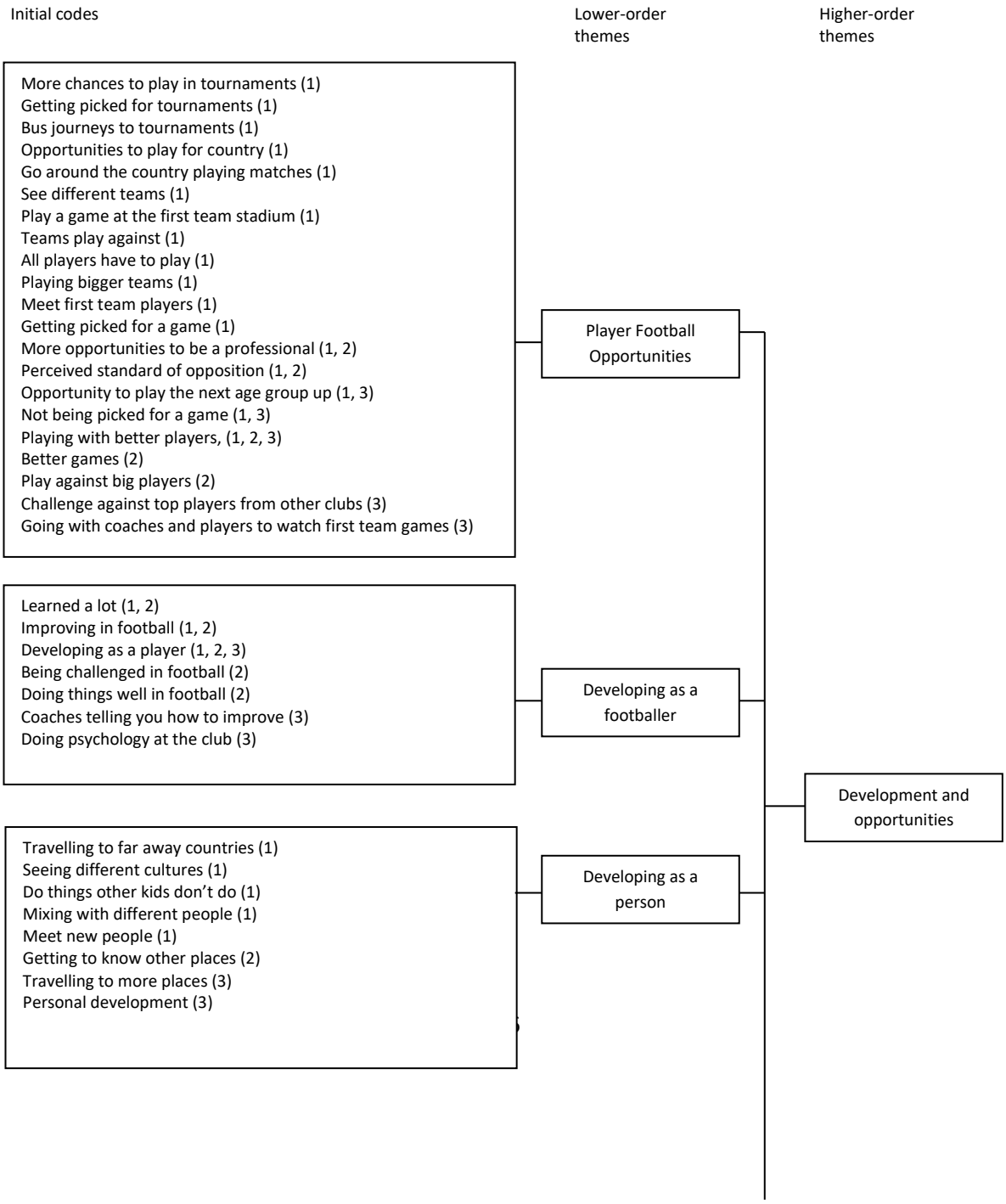
Players from all categories of football club indicated that developing and seizing opportunities in a football career is an important factor within the academy environment. First, players believed that positive football opportunities arose from

being a player in a football academy. Playing against other academy footballers and being part of a better standard of football were perceived as positive opportunities for a footballer:

> "Erm you get to play different people week in week out and you get to play better standard football when you're in an academy and playing other academies."

Players from category 1 clubs discussed a range of opportunities that were made available to them such as tournaments, playing for their national team, playing football around the country, playing at the first team stadium and meeting first team players. This is highlighted below:

> "Yeah the tours and that are good well like you don't normally get to go to like South Korea and countries like that so it is quite good and like you get to play football against different teams. It's good."



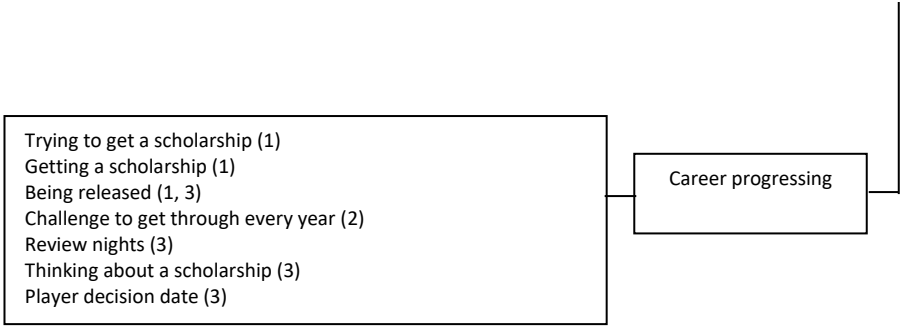


Figure 4. *(Continued)*

In addition, category 2 players agreed with category 1 players that getting more opportunities to be a professional footballer to be a positive, whereas category 1 and 3 players cited playing in the next age group up was seen to be a positive in their development.

Moreover, players noted that alongside these football opportunities players must keep developing as a footballer:

> "I just really like football so it makes it better being in academy where they'll give me proper coaching to help me improve and hopefully go further."

Category 2 and 3 players noted a few of ways the academies aid in the development of players such as being challenged, coaches advising on how to improve and learning about using psychology as a footballer.

It was also evident that developing as a football player was not the only aspect which needed to be developed in an academy, developing as a person was important too. Whilst players reported the different ways of developing as person through new experiences, travelling and new social interactions, only some category players specifically mentioned the importance of developing personally:

> ''[Developed] Yeah yeah. As a person as well as a player so."

The football opportunities, football development and personal development can only occur if the player progresses through each stage of the football academy. Players expressed that the process of review nights, progressing through every age group and the scholarship decision date at the end of the youth development phase is very highly thought about. As one player highlighted:

> "……the main focus like through the week is just always like working towards a scholarship which we get handed or not handed in February so it's just always thinking about that."

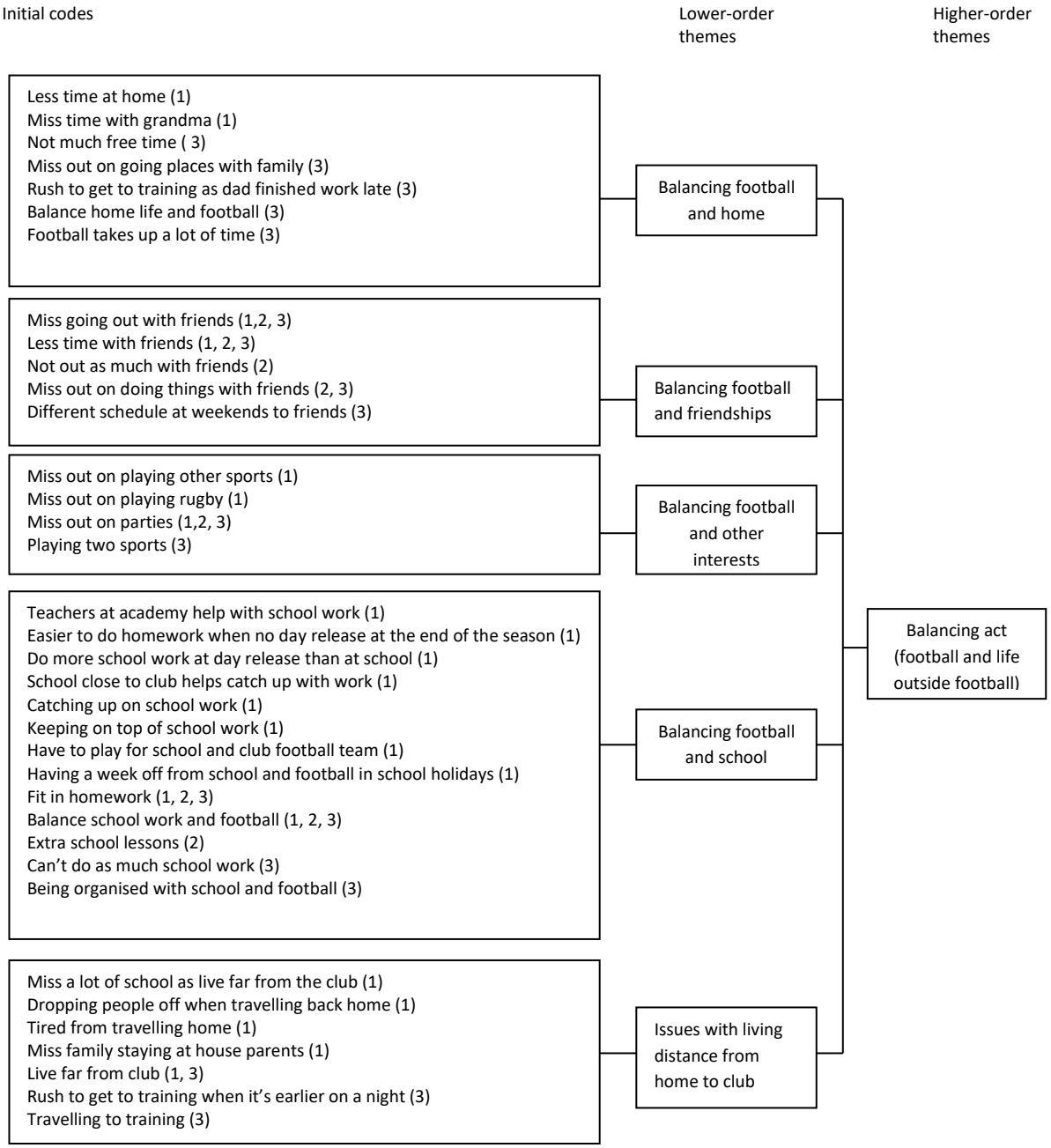


Figure 4. *(Continued)*

Balancing act (football and life outside football)

Balancing football and life outside of football emerged as a predominant theme throughout interviews with all category players. Category 1 and 3 players found it hard to balance home life and football since football takes up so much of their time. In particular, players discussed the consequence of football taking up a lot of time was spending less time with members of their family:

> "Sometimes my family but not really my friends……. Yeah like my grandma and stuff like that."

Moreover, it was noted that balancing football and friendships was hard, which also resulted in players spending less time with their friends outside of football:

> "Sometimes you can't go out as much…… with your friends like sometimes your friends will go to out to like parties and stuff and you don't really want to go coz you've got a match the next day or training the next day."

There were also concerns from players of the time at a football academy impacting on other interests outside of football such as parties. Specifically, category 1 players found that academy football resulted in them missing out on playing other sports and special occasions, and category 3 players discussed finding it hard to balance academy football and playing another sport. As a category 1 player highlighted:

> "I enjoy other sports but I don't get to do them coz of football commitments….. I missed out on playing my other favourite sport but…. rugby…. yeah. I had to stop playing that when I signed because they don't want you to like get injured…."

In addition to balancing academy football with home life, friendships and other interests, players found they had to balance academy football and school. Players found it hard to fit in homework around the football schedule:

> "Erm school work as well as balancing the football so it's getting the right balance between school and football really that's the main one….which is hard."

However, category 1 players were provided support from the school attached to the football academy for day release or the football club's own in-school to complete their homework; whereas category 2 and 3 players discussed that they had to organise their own after school lessons or be more organised with their school work. An example of a category 2 player's homework organisation:

> "Yeah fitting homework in, we get a lot of homework but erm I'm going to erm start bringing homework sheets to day release so I can do it at lunch."

Finally, it was discussed by category 1 and 3 players that there were negative issues with the living distance between their home and the football academy. Players mentioned that the long distance between their home and football academy results in long travel times:

> "It depends because sometimes when it's just me on my own I can get home in an hour but say like on a Monday after the training session I've got to drop someone off in [a location] and then I've got to go to [a location] and then to mine so it's like another 2 hours!"

Category 1 and 3 players discussed further the consequences this has on them such as missing a lot of school, being tired from travelling between home and the academy, and rushing to get to training. It became apparent that category 1 players have the option to stay at house parents to avoid this long-distance travel, however staying at house parents also had its negative issue: missing time with the player's family. House parents are people who are responsible for the safety and welfare of players. The individuals allow players to stay in their home during the football season as a closer option to the academy due to the player's family house being too far away.

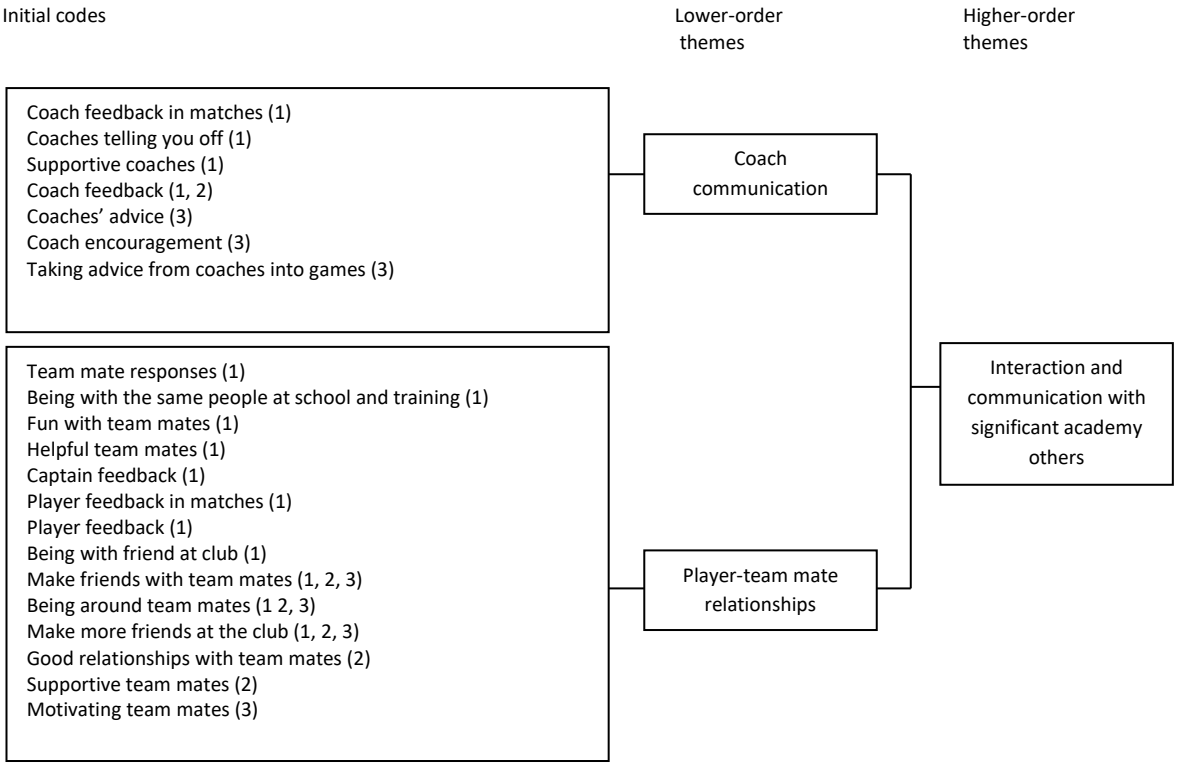


Figure 4. *(Continued)*

Interaction and communication with significant academy others

Players perceived that interacting with significant academy others such as coaches and team mates was an essential part of the academy environment. In particular responses from players detailed the importance of coach communication towards the players:

> "Obviously like if you get good feedback from say if you're like playing well and then it gets your confidence up so then you feel good when you go into games and stuff like that."

However not all category 1 players appreciated the negative comments from the coaches when the players needed to be disciplined:

> ‘‘Probably like if you get told off like say in 10 press ups or something and then your head goes down, well mine quite does quite a lot and then you just don’t anything for the rest of the session so that’s you just have to try and have the bestest session you can have and try not to let your head go down which is quite tough…. No like it’s the way they say it. If they like raise their voice quite loud and shout it.”

Having relationships with their team mates was also thought as an important interaction within an academy environment. Players discussed that making friends with other players and being around them is an important part of building relationships within the team:

> “……you get to make more friends like as you if you like stay a contract you’ll grow up with basically grow up with them coz they’ll be in your team from a young age.”

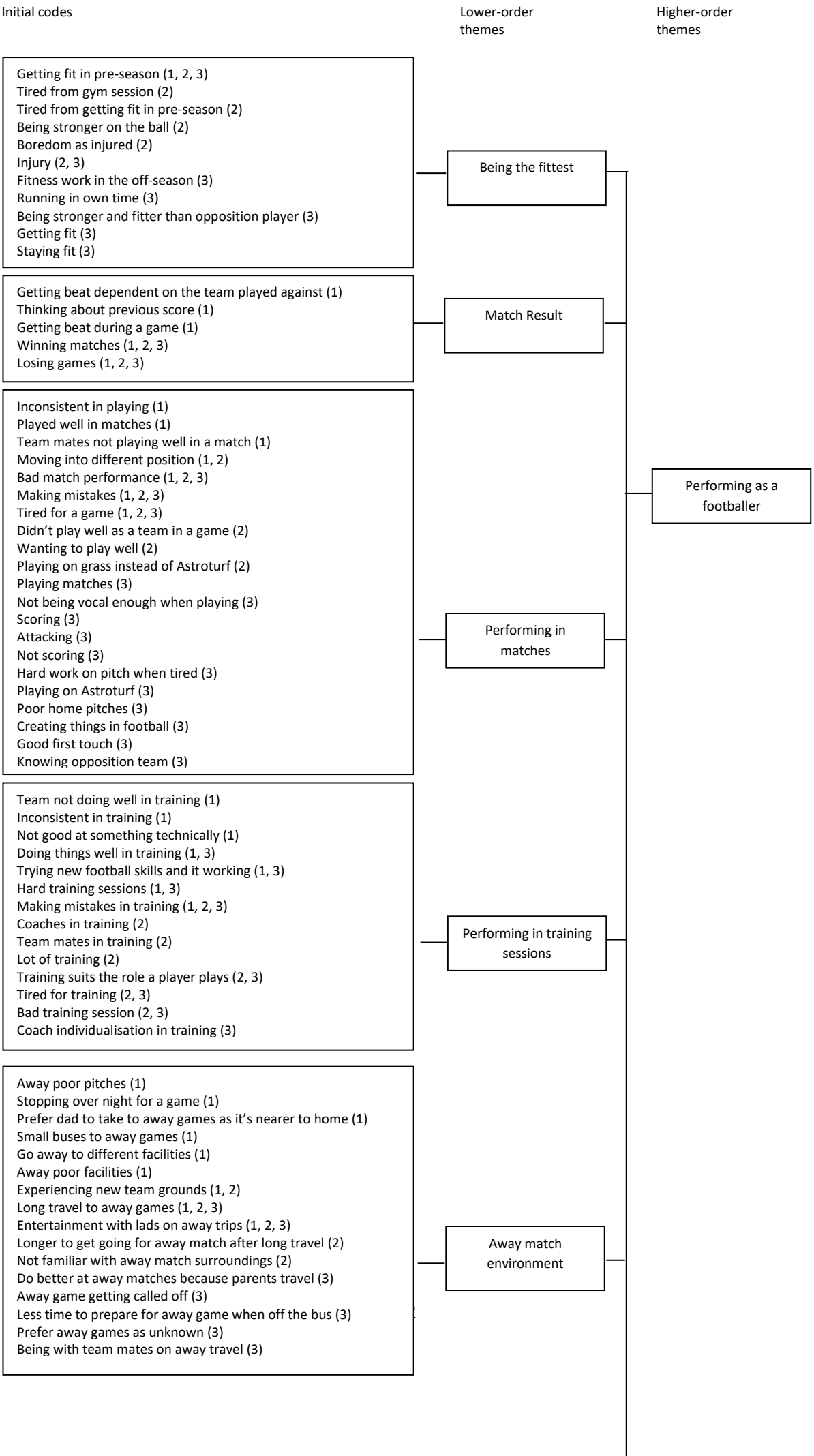
Players believed that certain aspects must be present to establish a good relationship such as communication with their team mates and support from their team mates. One example of team support was:

> “Erm good relationships with your team mates which I already have, we all have, we all have a laugh in the changing rooms like before and after training and then say if someone makes a mistake in training we won’t get on each other backs straight away we’ll be like we know you’re better than that you can do better than that and it lifts your head up instead of putting your head down.”

Performing as a footballer

The final theme to emerge from discussion with different category players was the environment was perceived to be a performance environment. Specifically, players mentioned the different ways the players had to perform, with one of the lower-order themes noted as being the fittest player. In particular the pre-season fitness programme was discussed by players as an important period of the year to achieve fitness, as one player highlights:

> “……erm the football stays the same really except for pre-season which is tough to get your fitness back.”


Initial codes
Lower-order themes
Higher-order themes
Getting fit in pre-season (1, 2, 3)
Tired from gym session (2)
Tired from getting fit in pre-season (2)
Being stronger on the ball (2)
Boredom as injured (2)
Injury (2, 3)
Fitness work in the off-season (3)
Running in own time (3)
Being stronger and fitter than opposition player (3)
Getting fit (3)
Staying fit (3)
Being the fittest
Getting beat dependent on the team played against (1)
Thinking about previous score (1)
Getting beat during a game (1)
Winning matches (1, 2, 3)
Losing games (1, 2, 3)
Match Result
Inconsistent in playing (1)
Played well in matches (1)
Team mates not playing well in a match (1)
Moving into different position (1, 2)
Bad match performance (1, 2, 3)
Making mistakes (1, 2, 3)
Tired for a game (1, 2, 3)
Didn't play well as a team in a game (2)
Wanting to play well (2)
Playing on grass instead of Astroturf (2)
Playing matches (3)
Not being vocal enough when playing (3)
Scoring (3)
Attacking (3)
Not scoring (3)
Hard work on pitch when tired (3)
Playing on Astroturf (3)
Poor home pitches (3)
Creating things in football (3)
Good first touch (3)
Knowing opposition team (3)
Performing in matches
Team not doing well in training (1)
Inconsistent in training (1)
Not good at something technically (1)
Doing things well in training (1, 3)
Trying new football skills and it working (1, 3)
Hard training sessions (1, 3)
Making mistakes in training (1, 2, 3)
Coaches in training (2)
Team mates in training (2)
Lot of training (2)
Training suits the role a player plays (2, 3)
Tired for training (2, 3)
Bad training session (2, 3)
Coach individualisation in training (3)
Performing in training sessions
Away poor pitches (1)
Stopping over night for a game (1)
Prefer dad to take to away games as it's nearer to home (1)
Small buses to away games (1)
Go away to different facilities (1)
Away poor facilities (1)
Experiencing new team grounds (1, 2)
Long travel to away games (1, 2, 3)
Entertainment with lads on away trips (1, 2, 3)
Longer to get going for away match after long travel (2)
Not familiar with away match surroundings (2)
Do better at away matches because parents travel (3)
Away game getting called off (3)
Less time to prepare for away game when off the bus (3)
Prefer away games as unknown (3)
Being with team mates on away travel (3)
Away match environment
Performing as a footballer

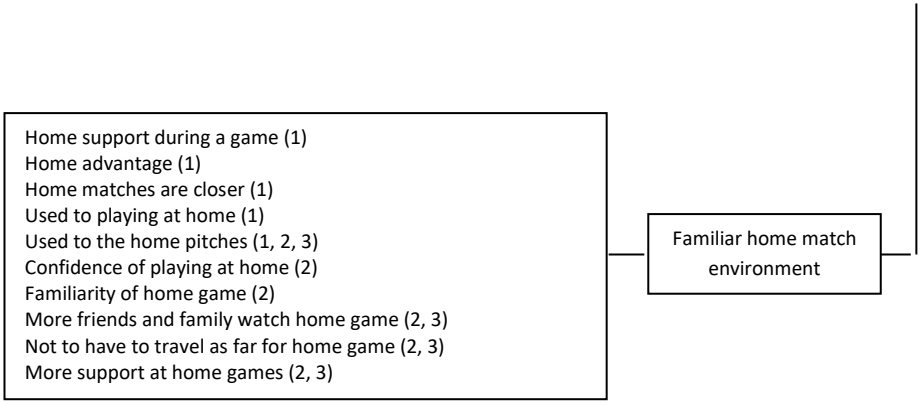


Figure 4. *(Continued)*

However, category 2 and 3 players have mentioned when they are not fit i.e., injured, they find it hard and boring:

> "Well this pre-season was a bit hard because I got injured. I had, I broke my foot and then I had a groin injury and ever since then I've been fine….My foot was fine I was back at training, I was out for 6 weeks then went on holiday and then just got back with, just did one training session with the physio and he said I could train…. Yeah [the groin injury], that was, I thought that was going to take just 2 minutes but it was actually think it was 2 er weeks, that was quite difficult coz I was bored."

Players also discussed the result of a match affects the environment, for example, winning is positive and losing is negative. As one player highlighted:

> "Losing. Don't like losing…… Yeah but I still do get angry though a bit coz we sometimes we should have won but we don't so like we go 3-0 up and they win 4-3 then it gets frustrating."

Moreover, category 1 players discussed further that when the players have lost a match, the level of negativity is dependent on which the opposition team is.

> "Well if we're playing like [higher league team] and that, like we normally get beat of them but if it's someone like [lower league team] or something then it would be like there not as good as [higher league team]"

In addition to the match result, players also discussed that the performance of players was seen to be important. Players suggested that a bad match performance was seen as a negative experience within the academy environment. As one player highlighted:

> "……then on Sundays sometimes if I have a bad game that gets to me a bit……. It sometimes affects the Monday but not really."

Players went into detail on how they performed badly in matches such as making mistakes, being tired, bad communication and not scoring, as well as commenting on poor pitches. However, category 3 players only discussed the

positives associated with a good performance in a match, such as scoring, attacking, good touch, creativity and knowing the opposition.

Performance in training sessions was another aspect the players perceived to be part of the academy environment. Players discussed that making mistakes was seen to be a negative experience whereas category 1 and 3 players noted having a good technical performance brings about a good feeling. As one player highlighted:

> "Yeah like say I've been watching things on YouTube the different skills on taking people on and it comes off you get like a buzz about yourself so it gives you that bit of lift or you score a good goal in training or always on the ball you never not on the ball. Like me I always want to be on the ball and create things and everything so if you don't get the ball then it's a bit of a downside but or a skill doesn't come off but you've just got to stick in it and carry on."

Players discussed further how their performance was influenced in training and identified that the type of training sessions was key:

> "When you get to go out of school [*for training*] you get put into groups so if you are a defender you go for your defending coach. They work on your ability and stuff, make you become a better player."

Category 1 and 2 players discussed that team performance was also an important influence that affects player performance:

> "Yeah coz if people [team mates] don't want to train then it'll just the training will just go down but when people want to train, when they want to do it, training is better."

In addition to the performance levels players perceived to be important, they discussed the various aspects of going to an away match that players have to be prepared for. The aspects identified were all seen as an influence on behaviour. Specifically, players mentioned the positive aspect as being with their team mates on the coach journey, yet described the negative aspect of the long travel to games. As one player highlighted:

> "How far away it is like when you get off the bus and you've only got half an hour to get warmed up in your legs, don't feel the same as like when you get off the bus with more time."

Some players discussed the positive aspects of going to play at an away game such as parents travelling for support, experiencing new grounds and preferring an unfamiliar football environment:

> "I don't know I just like being away from home really like not where you normally play and like stopping overnight and then playing the next day. I don't na I just think I like it really."

Though this view was not shared universally as other players felt the away environment to be worse, unfamiliar, uncertain and needed more time to prepare for the match:

> "Be like tired if you've sat on the coach for hours and you're not like fully prepared like."

As well as the away match environment being perceived to be an aspect of the players' football academy experience, player perceived the home match environment to also be an important aspect. Familiarity in terms of being used to the home pitches, having the same travel route, and receiving support at home matches were seen as positive aspects and helped in increasing confidence. As one player highlighted:

> "Home games are like, sounds really weird but I'll probably be used to the pitch."

4.5 DISCUSSION

The aim of this study was to interpret the perceptions amongst category 1-3 youth development phase players of their academy environment since the introduction of the EPPP. The study suggests football academy players perceived organisational, competitive and personal related stressors through five higher-order themes of pressures and expectations, development and opportunities, balancing act (football and life outside football), interaction and communication with significant academy others, and performing as a football player. These findings support existing literature identifying a wide range of interacting factors that influences athletes' behaviour (e.g., Arnold & Fletcher, 2012b; Fletcher et al., 2006, 2012b; Reeves et al., 2009; Woodman & Hardy, 2001). For example, findings concerning interactions with significant academy others (e.g., coach communication and team-mate relationships) were stressors also seen in Arnold and Fletcher's (2012b) taxonomic classification of stressors encountered by sports performers.

A limitation of early stress research was in failing to identify the origins of stressors by sports performers (Woodman & Hardy, 2001). Sport related stressors can be categorised as personal, competitive or organisational, where each category of stress poses different demands for the individual (Potts et al., 2018).

The findings of the present study provided partial support for Hanton et al.'s (2005) proposal to consider the origins of stressors in research. For example, issues arising from performing as a football player, such as the away match environment, could be directly related to sport performance and can be deemed as a competitive stressor; interacting with significant academy others could be seen as an organisational stressor; and issues arising from development and opportunities, such as developing as a person, could be seen as a personal stressor. However, it is proposed from the findings of this study, that the origins of stressors are not mutually exclusive. Stressors can be either or a combination of competitive, organisational and personal stressors. For example, balancing football and life outside of football can be deemed as a personal stressor since it includes life outside of the organisation yet could also be deemed as an organisational stressor since it is directly related to the sport organisation (i.e., life in the football academy). Therefore, it is important for future research to recognise that stressors should be viewed as interlinked and not discrete variables.

Research considering competitive stressors within the talent development environment of academy football is in its infancy. There is a need to cultivate appropriate development climates in which to nurture young players into professional players (Mills et al., 2014). The EPPP was introduced to seek significant gains in every aspect of player development (The Premier League, 2011). Hence, when investigating adolescent players within football academies, it may be vital to focus on overall development and not competitive performance of the player due to the developmental environment enforced by the EPPP. Therefore, issues directly related to sport performance and player development could be considered as developmental stressors, and competitive stressors could be redefined as issues directly related to match performance.

This study extends the findings of Reeves et al. (2009) who investigated age-related stressors amongst adolescent football academy players, by identifying new stressors within this environment. Category 1 and 3 club players reported spending less time with family and the issues resulting from the long distance between home and the club as negative factors associated with attending an academy. These findings add to previous literature since both have not been previously reported among players. Although Reeves et al. (2009) reported family

member behaviour as stressors among early adolescent academy football players; early and middle adolescent players in the study reported this alongside lack of time with family members. These findings suggest that family are still influential throughout a player's development at an academy, a notion which was supported by Harwood and Knight (2016) in that athletes still seek parental support with their sport; by Gledhill et al. (2017) in that social support is a vital part of successful talent development and by Mitchell et al. (2020) in that social support from family may be comprised by living away from home.

The long distance between the players' homes and football academy may influence time spent with the players' family. For example, category 1 and 3 players may spend less time with their family due to the longer time it takes to travel to and from the academy. Furthermore, category 1 players can miss out on time with their family since they stay with house parents during the week. However, it is important to note that category 2 club players may not have cited these stressors as the sample interviewed may have lived locally to the academy. These findings could potentially inform the family of their important role in influencing player development and the coaches of the negative effect living far from the football academy or being away from home on player well-being and performance.

All category club players reported that the pressures and expectations; development and opportunities; interaction and communication with significant academy others; and performing as a player were salient stressors. These findings support previous research into stressors among athletes (Fletcher et al., 2012b; Pain & Harwood, 2007; Reeves et al., 2009; Woodman & Hardy 2001). Players reported differing perceptions (i.e., positive or negative) within aspects of interacting with significant academy others (e.g., coach communication) and when performing as a player (e.g., away match environment). This supports Fletcher et al.'s (2012a) research in which not all performers reacted in the same way to the stressors encountered, a wide range of emotional, behavioural and attitudinal responses occurred. Situational properties of stressors and their appraisals offer potential explanations for understanding the different stress experiences of individuals from the same stressors (Lazarus, 1999). For example, ambiguous stressors are influential in stress experiences since ambiguity is linked to various

person factors (e.g., intolerance of uncertainty; Taha et al., 2014) which differ in individuals. Furthermore, the temporal properties of stressors on appraisals can help explain why a stressor may be appraised harmful at one point yet beneficial at another (Didymus, 2016). Therefore, future research should focus on performers' cognitive appraisals of the organisational stressors encountered (cf. Fletcher et al., 2006) and on identifying the demands and transactional alternatives athletes experience in relation to the situational properties (cf. Lazarus & Folkman, 1984; Thatcher & Day, 2008) to gain explanatory potential for a better understanding of stress experiences in elite youth football.

The lower-order themes of balancing football and friendships, football and other interests, and football and school were reported by all category club players to influence player experiences within football academies. The findings add to previous literature as they have not been previously reported among players and highlight the importance of life outside of football influencing players' experiences within academy football. Like previous research reporting that role conflict is a major source of strain for sports coaches (see Fletcher & Scott, 2010; Olusoga et al., 2009), players in the present study felt that a football-life conflict could be a cause of strain. Adapted from sport management research on work-family conflict (see Dixon & Bruening, 2005), the same principles could be applied to youth athletes, yet further research would be needed. For example, it could be explored whether football and life interact bi-directionally, with football affecting life outside football and life outside football affecting football. Given that outcomes from work-family interaction include both positive, such as job performance and life satisfaction; and negative examples such as job exit and stress (Boles et al., 2001; Cutler & Jackson, 2002), this finding is significant as football clubs do not want to see players leave the profession or affect their development. From an applied perspective, football clubs could provide support to help alleviate the football-life demands in order to reduce conflict and the impact on the players' lives outside of football.

Familiar home match environment also emerged as a new factor influencing players' perceptions of performing as a footballer. Players mentioned familiarity with being at home, travel and support as important influences of match day performance and well-being. These findings support the original game location

framework associated with home advantage in sport literature that has demonstrated that game location factors encompassing the crowd, familiarity and travel benefits home teams (Courneya & Carron, 1992). Furthermore, this is in keeping with the results of Gould et al. (1999) that identified the crowd as a positive performance influence. Interestingly, players also commented that there is pressure to perform in home matches from spectators which can negatively affect their match day experience. The current findings highlight the conflicting environment between being familiar with the match environment when performing as a footballer and the performance pressures when playing a match. The conflict of the home crowd provides support to stress theory since individuals can differ in their thoughts, emotions and actions despite sharing the same social groups and environmental stimulus (Lazarus, 1999). The difference is due to the interaction of different biological origins and developmental experiences (relational meaning; Lazarus, 1999). Football coaches should recognise the different reactions by their players to match day situations and utilise this knowledge for match preparation with the ideal to maximise home advantage and optimise performance pressures.

The study has extended previous athlete literature by identifying perceptions experienced since the introduction of the EPPP upon elite adolescent players working in a specific environment of English football academies. This has overcome previous literature limitations (Arnold & Fletcher, 2012b; Fletcher & Hanton, 2003; Woodman & Hardy, 2001) by focussing on one sporting organisational structure and implementing methodological questions designed towards not leading participants' answers e.g., group cohesion and interpersonal characteristics. Furthermore, the study has also provided a more in-depth account of the specific environments of category 1, 2 and 3 football academies created by the EPPP within the youth development phase. Although it was considered a strength of the study to use a qualitative methodology to obtain an in-depth account of players' perceptions, it was also a possible limitation on the reliance of retrospective recall. The criticism of using retrospective recall is the passage of time reduces the accuracy of recall from participants (Smith et al., 1999). Another limitation of this study was although results identified stressors during an interview, Nicholls et al. (2006) advised futures studies to adopt a longitudinal prospective design in order to examine ongoing stress experiences. Future research is required to address the lack of longitudinal prospective designs amongst elite

adolescent athletes in order to reflect the importance of contexts in examining the stress experiences unfold over time. Reeves et al. (2011) have provided initial research into stressors, perceived control, coping and coping effectiveness among early and middle adolescent football players. Yet in football, specific environments are created for different age groups by the academy structure (e.g., foundation, youth development and professional development phase; The Premier League, 2011) and so these specific contexts were not taken into consideration when Reeves et al. (2011) examined the organisational experiences of different ages of players. In line with Lazarus' (1999) stress theory, future research should include contextual characteristics that influence the stress process to account for variance in reactions across players.

In conclusion, the aim of this study was to interpret the perceptions of youth development phase players within English football academies since the introduction of the EPPP. Findings indicated that players experienced a wide range of factors similar to previous athlete research but with the addition of new stressors such as the issues with the living distance between the players' homes and the football academy; the balance between football and life outside football e.g., family, friends, school, hobbies and interests; and familiarity in football matches. The results are important given the EPPP's requirements for academies and the increased academy contact time for category 1 and 2 players; the consequence for players receiving this plan may have been overlooked. The Premier League and football clubs should recognise the increased demands their players face and now work towards providing appropriate levels of support for their players.

Coaches' Perceptions of Different Category Academy Environments within Elite English Football

PART B

4.6 ABSTRACT

The purpose of this study was to interpret coaches' perceptions of their academy environments to gain an understanding of potential stressors since the Elite Player Performance Plan (EPPP). Fifteen male coaches with at least four years' experience of working in a football academy environment participated in individual semi-structured interviews. Thematic analysis identified three higher-order themes that characterised the coaches' experiences: academy organisational changes, job role and responsibility changes, and the impact of job changes on life. Findings indicated that nine factors were perceived to have negatively influenced coaches (e.g., the EPPP audit demands, increased administrative work, significant other issues) and three stressors were perceived as positive influences on coaches (increased resources and facilities, increased accountability and improved coaching standards). Coaches' responses to stressors also varied supporting future research to consider personal and situational characteristics when investigating coach stress. Findings highlight the importance of the Premier League and football clubs providing appropriate support in dealing with the demands of the EPPP.

4.7 INTRODUCTION

Despite the plethora of research examining organisational stress in sport, there is a lack of evidence surrounding the perceptions of coaches in association football. Existing research has revealed various demands such as communicating with athletes, having multiple roles and responsibilities (Frey, 2007); leadership and environment issues (Thelwell et al., 2008); conflict and athlete concerns (Olusoga et al., 2009) but from coaches at different professional levels and across

different sports. These initial studies have revealed important information, but there is a need to pay attention to both positive and negative outcomes to address the imbalance in stress research and practice that has focussed on negative emotions and strain (Folkman, 2008). The current research builds upon previous exploratory research amongst coaches by providing a deeper understanding of what affects coaching experiences in football.

Developing the next generation of elite football players in England continues to be of importance for the English national side and professional clubs. The Football Association implemented the Elite Player Performance Plan (EPPP) to provide an optimum environment to develop better home-grown players (The Premier League, 2011). Coaches have a vital role to play in developing these home-grown players. Surveys have suggested contradictory results of the success of the EPPP (CIES, 2014; Conn, 2014) with only one research publication examining the influence of the EPPP's high training loads on perceptions of well-being and physical performance of players (Noon et al., 2005). It is important to also understand the influence of the EPPP from a coaches' perspective for example, to see the practical workings of the EPPP. However, there remains a significant gap in research relating to the investigation of the environment created by the EPPP and its influence on well-being amongst coaches.

Thus, the aim of part B of this study was to interpret coaches' perceptions of the academy environment within the youth development phases of academy football since the introduction of the EPPP. With the objective to identify and compare the organisational stressors of coaches within the youth development phase of academy status 1-3 environments.

4.8 METHOD

4.8.1 Participants

Fifteen full-time male academy football coaches were purposively recruited from the youth development phase of English football club academies. The sample comprised five coaches from two Category 1, five coaches from two Category 2 and five coaches from three Category 3 football clubs. This was in keeping with

similar research in this area (e.g., Olusoga et al., 2009) where 12-16 coaches were recruited. Notably saturation was reached for all coaches from each category club, whereby the range of thematic factors were identified (see Hennink et al., 2017). Thematic saturation was reached throughout the interviews where no new ideas or themes appeared (Lincoln & Guba, 1985). Coaches were aged between 29 and 56 years (*M* = 38.87 years, *SD* = 9.30), held the minimum of a UEFA B licence and had between 4 and 26 years (*M* = 12 years, *SD* = 6.60) experience coaching within a football academy setting. It was required that coaches had worked in an academy environment prior to 2011. This was to ensure the coaches' knowledge of working in an academy football environment before and after the introduction of the EPPP.

4.8.2 Procedure

The same procedure was used as Study 1 Part A. Interviews ranged between 37 – 115 minutes. See Appendix 9, 10 and 12. for the information sheet, consent form and debrief sheet.

4.8.3 Interview Guide

In keeping with research in the area (e.g., Olusoga et al., 2009), a semi-structured interview guide was developed to ensure all participants were asked the same set of questions (see Appendix 11). A pilot interview was conducted with an academy football coach, not included in the sample, which enabled the principal researcher to make minor refinements to the interview structure and questions. For example, reframing the order of questions to improve the flow of the interview and the re-wording of questions to improve participant understanding. The final interview guide was divided into four sections. In the first section, introductory questions focussing on demographic information and work experience were asked to facilitate descriptive talking and to build rapport with the principal investigator (Kvale & Brinkmann, 2009). Example questions included 'Could you tell me how you got involved in coaching?' The second and third sections focused on identifying the factors associated with being a coach that was perceived to affect well-being pre- and post-EPPP. For example, 'Can you describe a typical week for you as a coach in a football academy? Can you describe what being a coach was like before the introduction of the EPPP?' These questions were designed not to

mislead participants' responses into pre-determined categories of stressors as used by previous research in this area (e.g., Olusoga et al., 2009). Probes were used to explore participant descriptions further (e.g., 'How did you feel about that? How are you finding that?'). In the final section, coaches were given the opportunity to discuss any other relevant issues or expand upon any previous comments.

4.8.4 Data Analysis

The same data analysis were used as Study 1 Part A. Coaches' responses generated a total of 140 codes.

4.8.5 Trustworthiness

The same methods were used for trustworthiness as in Study 1 Part A.

4.9 RESULTS

In keeping with previous research exploring coaches' perceptions within sport (e.g., Frey, 2007; Olusoga et al., 2009) raw data responses are presented in Figure 1. The results are presented using quotes from the interviewees within the interpretation of the data to allow for context. Discussions with coaches resulted in the establishment of 18 lower-order themes, which were then in turn organised into the following three higher-order themes: academy changes, job role and responsibility changes, and the impact of job changes on life.

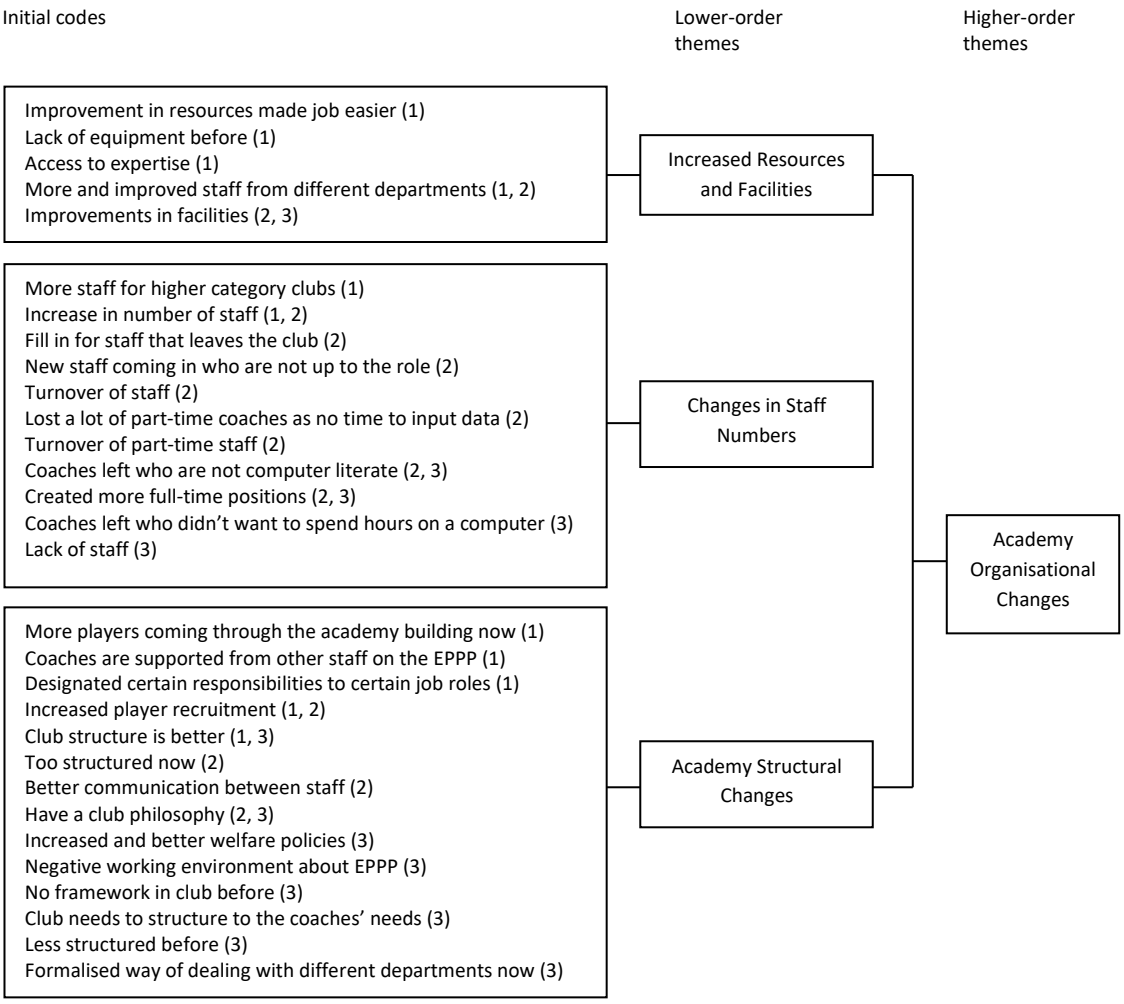


Figure 4.1. Factors identified by football academy coaches, whereby 1=category 1, 2=category 2, 3=category 3 coaches

Academy organisational changes emerged as a predominant theme throughout interviews with all coaches from different categories of football club. Coaches mentioned that as a result of the EPPP, there has been an increase in resources and facilities at the football academy. An improvement in resources, equipment facilities, staff from different departments, and access to staff expertise were all examples of the benefits within the organisation that the EPPP has changed. As one coach highlighted:

> "Yeah the facilities have got better, you know, you have to put in facilities. We're getting a 4G pitch out there and indoors, you know, we have an indoor area, the pitches are better and you have a physio beside you, you know, standing beside you so I think in that respect, you know, it's been a lot better."

Despite category 1 and 2 coaches describing the increase and expertise in staff within different departments of the academy, all coaches commented on a change in staff numbers since the EPPP was introduced. It became apparent

there has been an increase in staff at category 1 and 2 football academies with more full-time positions being created at category 2 and 3 academies:

> "Erm, the EPPP has developed more full-time roles so without the EPPP coming in I wouldn't have been needed, erm, so that's better."

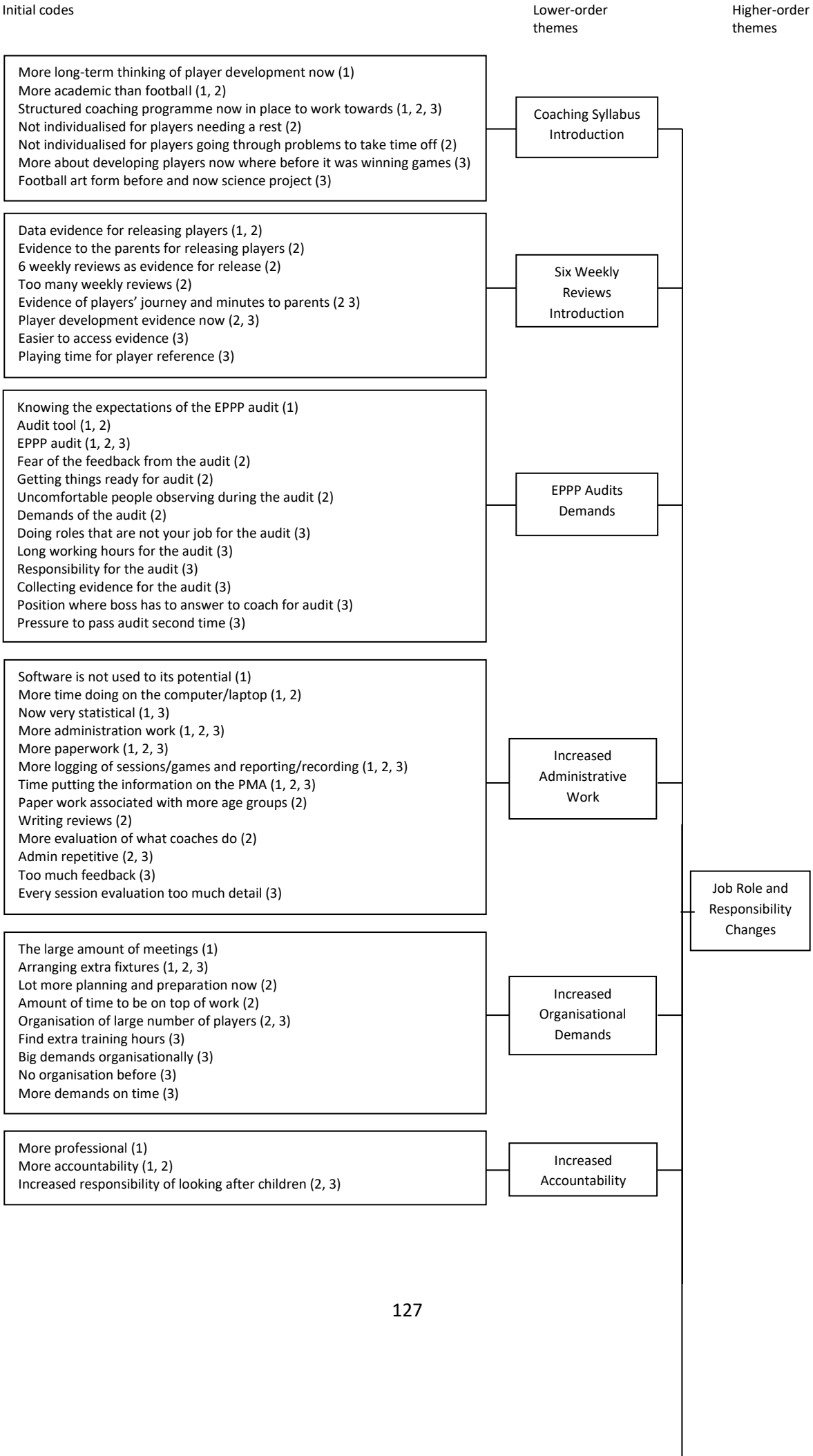
Although there was an increased number of staff at football clubs, the suitability of the staff being employed was an area of concern in one category 2 football club and there was still deemed a lack of staff employed at category 3 football club academies. Category 2 and 3 coaches also commented on how a lot of part-time and full-time coaches have left due to the administrative computer work. For example, becoming computer literate, working on a computer and the lack of time to input training and match data on a computer were issues for coaches. As one category 2 coach explained the issue of the high turnover of staff:

> "I think the biggest challenge I've had since I've been here is the turnover of staff. I've had a lot of part-time staff leave, replace them and then the new ones leaving because we made a step from category 3 to category 2 and now the amount of work that we expect off them for us to stay at cat 2 is a fair bit…"

Moreover, coaches noted that it was not just changes in staff, but that changes in the structure of football academies have also resulted from the EPPP introduction. Specifically, the increase in a structural framework of academies was mentioned as a benefit to the coaches in category 1 and 3 football academies, as one coach described:

> "I think the club structure of how it wants to deliver football is far better. I think probably most clubs now have a good idea of every coach knows what it is they want to try and achieve; that would definitely be the best thing from it."

However, some category 2 and 3 clubs labelled the structure as "too structured" and felt it needed to be tailored towards the coaches' needs. In addition, coaches noted different working environments resulting from the change in structure, for example, category 1 coaches received support from staff during the EPPP, and category 2 coaches were communicating better with other staff, whilst category 3 coaches were surrounded by a negative working environment when discussing the EPPP. Despite the differences between category coaches, similarities did exist: an increase in player recruitment was a similarity described by category 1 and 2 football coaches and having an academy football club philosophy was deemed important by category 2 and 3 club coaches.


Initial codes
Lower-order themes
Higher-order themes
More long-term thinking of player development now (1)
More academic than football (1, 2)
Structured coaching programme now in place to work towards (1, 2, 3)
Not individualised for players needing a rest (2)
Not individualised for players going through problems to take time off (2)
More about developing players now where before it was winning games (3)
Football art form before and now science project (3)
Coaching Syllabus Introduction
Data evidence for releasing players (1, 2)
Evidence to the parents for releasing players (2)
6 weekly reviews as evidence for release (2)
Too many weekly reviews (2)
Evidence of players' journey and minutes to parents (2 3)
Player development evidence now (2, 3)
Easier to access evidence (3)
Playing time for player reference (3)
Six Weekly Reviews Introduction
Knowing the expectations of the EPPP audit (1)
Audit tool (1, 2)
EPPP audit (1, 2, 3)
Fear of the feedback from the audit (2)
Getting things ready for audit (2)
Uncomfortable people observing during the audit (2)
Demands of the audit (2)
Doing roles that are not your job for the audit (3)
Long working hours for the audit (3)
Responsibility for the audit (3)
Collecting evidence for the audit (3)
Position where boss has to answer to coach for audit (3)
Pressure to pass audit second time (3)
EPPP Audits Demands
Software is not used to its potential (1)
More time doing on the computer/laptop (1, 2)
Now very statistical (1, 3)
More administration work (1, 2, 3)
More paperwork (1, 2, 3)
More logging of sessions/games and reporting/recording (1, 2, 3)
Time putting the information on the PMA (1, 2, 3)
Paper work associated with more age groups (2)
Writing reviews (2)
More evaluation of what coaches do (2)
Admin repetitive (2, 3)
Too much feedback (3)
Every session evaluation too much detail (3)
Increased Administrative Work
The large amount of meetings (1)
Arranging extra fixtures (1, 2, 3)
Lot more planning and preparation now (2)
Amount of time to be on top of work (2)
Organisation of large number of players (2, 3)
Find extra training hours (3)
Big demands organisationally (3)
No organisation before (3)
More demands on time (3)
Increased Organisational Demands
More professional (1)
More accountability (1, 2)
Increased responsibility of looking after children (2, 3)
Increased Accountability
Job Role and Responsibility Changes

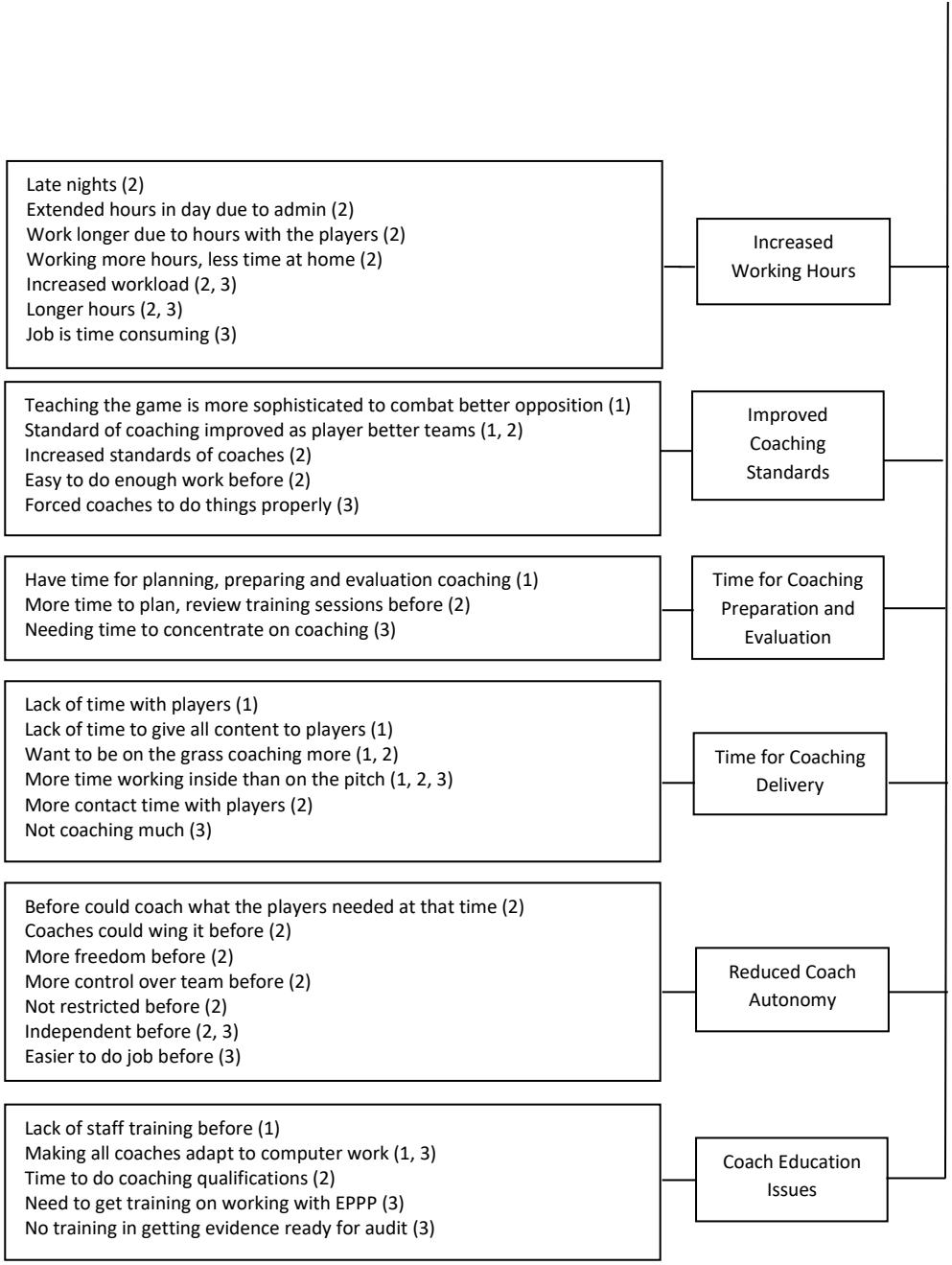


Figure 4.1. *(Continued)*

Job Role and Responsibility Changes

Changes in the coaches' job role and responsibilities emerged as a predominant theme throughout the interviews with all category coaches. Coaches described that the requirement of the EPPP was to introduce a coaching syllabus. Having a structured coaching programme to work towards was seen as beneficial by category 1 coaches in that it now includes long-term player development and by category 3 coaches in that it focuses on developing players rather than winning football matches. All coaches discuss the negative qualities of the coaching

syllabus is that it has taken away football being an art form and applied scientific academic principles to coaching:

> "Yeah so for me its educationist trying to impose on football…so my only problem with all of it is its not relevant, some of it I think is not relevant to football because you can't consolidate things in football coz there's always something else, you never get the same thing happen twice on a pitch ever…"

In addition, category 2 coaches felt the coaching syllabus does not include individualisation to players' needs such as players needing a rest and taking time off for personal problems. This issue is highlighted below:

> "You know stood in front of you when that lad needs a rest and you have an audit tool that says everyone should be in this amount of hours a week, you know, don't understand that individual needs that break that week, you know, then his hours don't clock up on the performance clock…"

As well as introducing a coaching syllabus, coaches noted that the EPPP required the coaches to conduct 6-weekly reviews for players. Coaches suggested that having data evidence needed to show the players and parents in these reviews was a benefit. As one coach highlighted:

> "…the good thing about EPPP and PMA is that everything is logged so we can actually sit there and go well you actually played and give a complete breakdown of how many minutes they've played, who is was against, what position they played, so there's no comebacks anymore, they can't sit there and say you've not played coz they've got to play 50% of the games over the year, so as long as we do that then there's nothing anybody can do, that's the part you've got to make sure you do."

Although the 6-weekly reviews were seen as positive evidence-based feedback processes between coaches and players, category 2 coaches were concerned that there were too many reviews. It was also evident that coaches believed the process of the EPPP audit was demanding as one coach highlighted:

> "It was stressful for everyone involved, obviously they were in the process of trying to tie everything up and get it all on the computer and send it all off so there was people panicking, there was a lot of trying to get processes written down that they already did but just to try and get it written down and on the slides so it would show on the evidence base, whatever they were doing."

Coaches noted the different demands placed upon themselves during the audit process. Category 1 coaches mentioned the expectations of the audit; category 2 coaches mentioned the preparation, uncomfortable observations and fear of feedback of the audit; and category 3 coaches mentioned the long working hours, responsibility, collecting evidence, doing other job roles, pressure and boss

pressures during the audit. Furthermore, it became apparent that category 1 and 2 coaches found using the audit tool demanding during the audit process.

As well as the EPPP requirements of the coaching syllabus, 6-weekly reviews and the audit, further factors have emerged from the EPPP introduction. Coaches described that there has been an increase in administrative work. Specifically, coaches detailed that there has been an increase in paperwork, the recording of training sessions and matches, and the time inputting this information on the Performance Management Application (PMA) computer programme. As one coach has highlighted:

> "…the coaching side of it before the EPPP was very little laptop work, very little coz you always had reviews, you always did that erm but, you know, before you used to write a session plan and that was it…now it's learning objectives and reviews, review the learning objective, individual development plans, you know, the kids have got to write about it."

Category 1 and 3 coaches discussed further that the focus of administrative work has become more statistical in nature, whilst category 2 and 3 coaches discussed that there was a lot of repetition within the administrative duties. In addition, coaches noted another factor resultant from the EPPP: the increase in organisational demands. Coaches mentioned that they need to organise extra fixtures for the players. As one coach highlighted:

> "Yeah coz the group I have this year had 21 players, the group I've got for next year at the minute I've got 23 so we have 2 games to facilitate, everyone gets a game a week so."

Moreover, category 2 and 3 coaches felt that organising large numbers of players was demanding. It became apparent that there were further differences between the increased organisational demands of category status coaches. Category 1 coaches referred to the increased number of meetings; category 2 coaches referred to the increased coaching planning and preparation; and category 3 coaches referred to the requirements to find extra training hours for the players. Similarly, category 2 and 3 coaches found that due to their increased workload, administrative work and contact time with the players, this resulted in an increase in working hours since the introduction of the EPPP. As one coach highlighted:

> "I'll probably work longer because the hours you have to meet with the kids, they have to meet certain hours each week over the course of a year, so you train more…but you're working longer."

However, all coaches noted that the time for coaching preparation and evaluation of training sessions and matches has changed since the EPPP introduction. Specifically, category 1 coaches found that they have enough time to plan, prepare and evaluate training sessions; whereas category 2 and 3 coaches continued their belief that they have less time to concentrate, plan and review training sessions. The amount of time for coaching preparation and evaluation has been suggested to influence coach performance. These issues are highlighted below:

> *[Before the EPPP]* "And like I say, you had more time instead of having to erm evaluate everything and then input data into maintenance systems such as the PMA, you had more time to actually go and plan instead of getting all that done and then rushing through a plan to then get back out and delivering another session. So you had more opportunity to plan your session to make sure it was more worthwhile for when the kids to come in, to something that's rushed and they you're out and, you know, you deliver it."

As well as the time for coaching preparation and evaluation changing, coaches also believed the time for coach delivery of content has changed since the EPPP introduction. Coaches mentioned that more time is spent working inside than on the football pitch and that they want more time coaching outside. As one coach highlighted:

> "You spend more time sat on your backside then you do getting grass on your boots."

Category 1 and 2 coaches went further in their descriptions by suggesting the lack of time delivering all the coaching content and time with the players on the football pitch was seen as negatively influencing player development. In addition, another negative aspect of the EPPP introduction was described by category 2 and 3 coaches as the reduction in coach autonomy. Prior to the EPPP introduction coaches perceived their role to be more independent, easier, and to have more control over what the team and players were coached. These issues are highlighted below:

> "It was you felt like you had more control or say over your team if you know what I mean? You know you used to watch them and think I know what they need, they need this, they need this, you know; whereas now it's they need that but I've really got to work on this tonight."

As a result of the EPPP introduction, a factor influencing all coaches was coach education issues. It became apparent there were a range of issues from category 1, 2 and 3 coaches (respectively: the increase in staff training; lack of time to complete the coaching qualifications; lack of training on the audit process and working with the EPPP); however, the prominent issue with all category coaches was the necessity for all coaches to become computer literate, as discussed below:

> "The other side of that is its *[the EPPP]* forced a lot of good coaches out of the game as well because they just, they're either not computer literate, don't want to become computer literate or didn't get into football coaching to spend 2 or 3 hours a day on a computer."

More positive aspects coaches experienced from the EPPP introduction was the increase in accountability of the coaches. As one coach highlighted:

> "…coaches are starting to be a little bit more accountable for players which is fantastic and that always needed to happen."

Professionalism and having responsibility of looking after the child players are aspects of accountability that category 1, 2 and 3 coaches have found to have increased. Finally, coaches noted that there has been an improvement in coaching standards since the introduction of the EPPP. As one category 1 coach highlighted:

> "…because you are playing good opposition every week, the game has become more sophisticated so the teaching of the game has to become more sophisticated now coz rather than just playing 'raggied arse Rovers' once every 6 weeks now you play *[football club]* next week, then *[football club],* then *[football club],* then *[football club],* so for the players to perform really well, the standard of coaching has to be really good…"

It was believed the improvement of coaching standards was a consequence of playing against better teams by all category 1 and 2 club coaches; whereas all category 2 coaches also noted, alongside category 3 coaches, that the EPPP requirements have forced the coaches to work to appropriate standards.

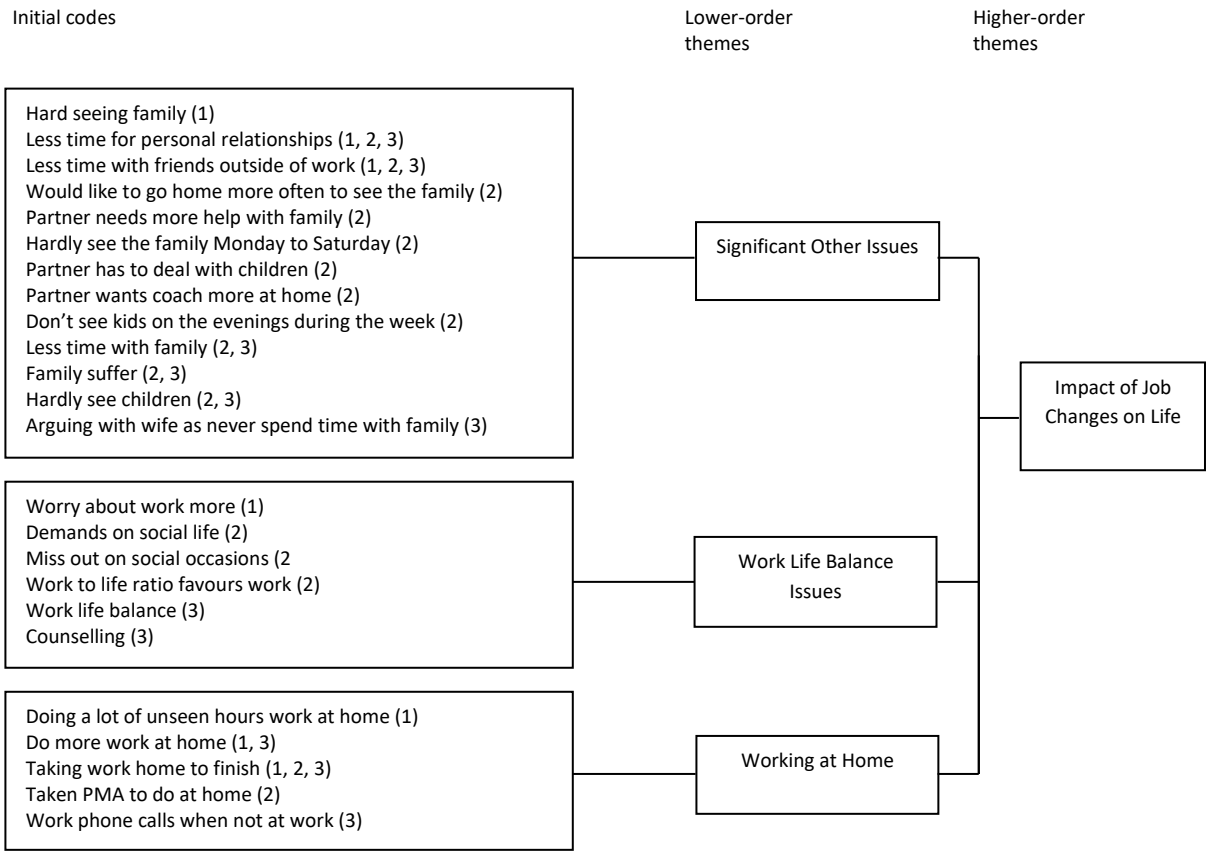


Figure 4.1. *(Continued)*

Impact of Job Changes on Life

The final theme to emerge from discussion with different category coaches was the impact the EPPP has had upon their lives outside of work. Specifically, coaches mentioned the negative issue of having less time dedicated to personal relationships and friends outside of work. As one coach highlighted:

> "Er, I think working hours have changed so like I say we used to do the one full day, now that we are doing 2 evenings I'm here for an extra evening a week…I suppose just the hours in terms of how unsociable they are it means it's difficult…" [to see each other].

Furthermore, coaches discussed how hard it is to see their family and children. Some of the category 2 and 3 club coaches mentioned that it had resulted in their partner needing more help with the family and arguments with their wife.

Another subtheme relating to life outside of work was the increase in work to life ratio issues since the introduction of the EPPP. It became apparent there were a lot of negative consequences from working as a coach. Category 1

coaches detailed the amount of worry; category 2 coaches detailed the increased demands on their social life and missing out on social occasions; and category 3 coaches detailed having counselling. In general, category 2 and 3 coaches discussed how the work to life ratio favours work:

> "And your work to life ratio is always one [issue] as well, you know, its 7 days a week"

Coaches also take their work home to complete since the introduction of the EPPP. As one coach highlighted:

> "Yeah, I've been away this weekend and I've been on my laptop doing some work. Yeah, [the PMA] it takes a lot of time up."

5.0 DISCUSSION

The aim of this study was to interpret perceptions amongst category 1-3 youth development phase coaches of their academy environment since the introduction of the EPPP. The findings suggest football academy coaches perceived organisational, performance and personal related stressors through three higher-order themes of the football clubs' organisational changes, job role and responsibility changes and the impact of these job changes on the coaches' lives. These findings support existing literature identifying a wide range of factors that influence coaches (e.g., Dixon & Tuner, 2018; Olusoga et al., 2009; Thelwell et al., 2008). For example, findings concerning job role and responsibility changes (e.g., time for coaching preparation and evaluation, and time for coaching delivery) were similar to time pressure stressors also seen in Dixon and Turner's (2018) research.

Similar to the findings in Study 1 Part A, the findings of the present study provided partial support for Hanton et al.'s (2005) proposal to consider organisational and competitive stressors in research. In this sample, the competitive stressor definition for athletes is adapted and redefined as a performance stressors for coaches (issues arising from the performance of the coaches' athletes or their own performance in a coaching capacity; Thelwell et al., 2008) For example, issues arising from academy changes and job and responsibility changes, such as increased resources and facilities, could be directly related to the sport organisation and can be deemed as an organisational

stressor; issues arising from job and responsibility changes, such as reduced coach autonomy, could be deemed as a performance stressor, and issues arising from the impact of job changes on lives, such as significant other issues, could be seen as a personal stressor. However, in support of Study 1 Part A's findings, Part B findings can also suggest that the origins of stressors are not mutually exclusive. Similar to the players balancing football and life outside football, coaches also have work-life balance issues. Keeping a work-life balance can be deemed as a personal stressor since it includes life outside of the organisation yet could also be deemed as an organisational stressor since it is directly related to the sport organisation (i.e., working in a football academy). Therefore, it is important for future research to recognise that stressors should be viewed as interlinked and not discrete variables.

This study, to the researcher's knowledge, is one of the first to investigate coaches' perceptions of the impact the EPPP has made in category football club academy environments. Category 2 and 3 club coaches reported increased working hours and reduced autonomy as additional negative demands within the job role and responsibility changes stressor. Category 1 coaches did not report these issues. These findings provide some support to previous research into stressors among coaches (Didymus, 2016; Olusoga et al., 2009) and research into coaches' enactment of the EPPP (O'Gorman et al. 2021) and extend the current literature through enhancing understanding of the salient factors that may be specific to academy football category 1 to 3 clubs. These findings could possibly inform academy managers and the Premier League of the potential negative affect the EPPP's requirement of increased coaching contact time and the further work associated has had upon the working hours, and also the potential negative effect the introduction of coaching requirements has had on reducing coach autonomy by category 2 and 3 coaches. The increased working hours might be influenced by the change in coaching staff. For example, the findings appear to support Olusago et al.'s (2009) consequence of sport status i.e., consequences of the minority status of the sport. This could be due to the lower the category status of the football club and the need for more staff. In addition, with category 1 coaches reporting more staff and category 2 and 3 coaches citing a lot of staff leaving, this will increase the workload and in turn working hours of academies with less staff. The Premier League should recognise that category 2 and 3 football clubs have

less finance to employ the suitable number of staff to meet the demands forced by increased coach contact time. Moreover, in relation to the reduced coach autonomy stressor, there is an abundance of literature showing autonomy to improve cognitive and behavioural performance (see Legault & Inzlicht, 2013), as well as according to the basic psychological needs theory (Ryan & Deci, 2000) satisfaction of autonomy improves psychological and physical well-being (Deci & Ryan, 2000). The Premier League and head coaches designing coaching syllabuses could potentially work to incorporate a more autonomous supportive environment that encourages coach decision-making, choice and perspectives. Potential benefits could see less emotional and physical exhaustion by coaches (Adie et al., 2012), prosocial behaviour by athletes (Hodge & Lonsdale, 2011), and less turnover rates from coaches and athletes (Fry & Gano-Overway, 2010).

The following stressors were deemed as a negative influence upon all category club coaches: some aspects of changes in job role and responsibilities (EPPP audit demands, increased organisational demands, increased administrative work, and time for coaching delivery) and the impact of job changes on the coaches' lives (significant other issues, work-life balance issues, and working at home). The emergence of the EPPP audit demands and working at home stressors adds to previous coaching literature as both have not been previously reported among coaches. It is not surprising that the inclusion of the EPPP audit demands is a new occurrence since this is specific to the football academy environment. Whereas increased organisational demands, increased administrative work and time for coaching delivery (within job role and responsibilities change stressor) supports Frey (2007) who found collegiate coaches reported the pressure of having many roles and responsibilities to be most stressful. In addition, the findings support Didymus (2017), Olusoga et al. (2009) and Thelwell et al. (2008) who also found similarities to organisational demands, administration and time for coaching delivery. The findings of the present study not only suggest the predominantly negative impact the introduction of the EPPP has had on coaching roles and responsibilities (see Figure 1) but also appear to capture stressors related to issues of role conflict. Like Olusoga et al. (2009) and previous research reporting that managing multiple roles is a major source of strain for coaches (see Fletcher & Scott, 2010), coaches in the present study felt that managing the different aspects of the new job role and

responsibilities (e.g., coaching, administration, organisation, the audit process) was a cause of strain. Given that role conflict can be a significant predictor of burnout among coaches (Goodger et al., 2007), this finding is important as football clubs do not want to see coaches leave the profession as a result of the EPPP. In addition, significant other issues and work life balance issues were negative aspects within the impact of job changes on the coaches' lives, which supported previous research (Didymus, 2016; Frey, 2007; Olusoga et al., 2009; Thelwell et al., 2008). Consistent with the results of Pastore (1991, 1992) and Frey (2007), these findings are commonly cited reasons for coaches leave the profession (e.g., lack of time with family and friends, interference with personal time). From an applied perspective, football clubs may consider providing support (e.g., social support and stress management interventions) to help alleviate the increased job role and responsibility demands in order to reduce role conflict and the impact on the coaches' lives outside of football.

Aspects of identified stressors were also seen as positive influences upon coaches, which include increased facilities and resources of the football clubs, improved coaching standards, and increased coach accountability. Although the literature on coach stress tends to focus on stressors as negatively appraised e.g., coaches are negatively affected by limited resources and facilities (e.g., Didymus, 2016; Olusoga et al., 2009), the findings of the present study appear to support the introduction of the EPPP increasing the number of resources and facilities within football academies. Coaches discussed this finding as a help to their coaching performance. The emergence of improved coaching standards and increased coach accountability adds to previous literature as these have not been reported as positive factors associated with coaching. Olusoga et al. (2009) reported athletes' professionalism as a stressor among coaches, whereas with the introduction of the EPPP the coaches' professionalism and accountability towards players is now seen as an important factor.

Overall, the current findings support previous research (e.g., Frey, 2007; Didymus, 2016) where coaches can respond to stressors in both positive and negative ways. Organisational stressors do not always relate to negative consequences; stressors can also be associated with positive emotions, satisfaction and determination (Fletcher et al., 2006, 2012a). This falls in line with

the transactional conceptualisation of stress (cf. Lazarus & Launier, 1978) where the stressors from the environment are mediated by the processes of perception, appraisal and coping, and as a consequence can result in positive or negative responses (Fletcher et al., 2006).

Coaches also reported differing perceptions (i.e., positive or negative) within the higher-order themes of academy organisational changes (changes in staff numbers, academy structural changes) and job and responsibility changes (coaching syllabus introduction, 6-weekly reviews introduction, time for coaching preparation and evaluation, and coach education issues). This supports Fletcher and Scott (2010) who noted that not all coaches respond the same way and Didymus (2017) on differing outcomes from the same stressor at different points in time. This is consistent with Lazarus' (1999) stress theory in which individual differences and situational characteristics can influence the stress process and account for variance in reactions across coaches. Therefore, future research should focus on coaches' explanatory potential of the concept of appraisal to shed a light on the reasons behind coaches' diverse stress experiences (Fletcher & Scott, 2010). It may be important for football clubs to consider the different reactions to similar stressors by their coaches and provide appropriate support when deemed necessary.

The study has extended previous coaching literature by identifying the stressors experienced by the introduction of the EPPP upon elite coaches working in a specific environment of English football academies. This has overcome previous literature limitations (e.g., Olusoga et al., 2009; Thelwell et al., 2008) by restricting the type of sport and organisational structure and climate of the sport to provide an in-depth account of the specific environments of category 1, 2 and 3 football academies created by the EPPP within the youth development phase. Although it was considered a strength of the study to use a qualitative methodology to obtain an in-depth account of coaches' experiences, it was also a possible limitation on the reliance of retrospective recall. The criticism of using retrospective recall is the passage of time reduces the accuracy of recall from participants (Smith et al., 1999). Yet although it may have been of value to interview coaches at the first opportunity when the EPPP was fully embedded within the football academy, the further delay could provide a better reflection and

complete account of the experience (Folkman & Moskowitz, 2004). Another limitation of this study was although results identified stressors during an interview, Norris et al. (2017) advised futures studies to make further use of longitudinal prospective designs in order to examine coaches' ongoing stress and well-being. This is due to the popularity of cross-sectional designs (78.9%) within stress research among sports coaches and the value of longitudinal research for detecting changes in phenomena over time (Norris et al., 2017) Future research is required to address the lack of longitudinal prospective designs amongst coaches in order to reflect the importance of contexts in examining the stress experiences unfold over time.

In conclusion, the primary aim of the study was to interpret coaches' perceptions (stressors) of the impact of the EPPP introduction within English football academy environments. Academy organisational change, changes in job role and responsibilities and the impact of job changes on the coaches' lives were deemed important stressors by youth development phase coaches. Findings indicated that coaches experienced a mostly negative response to the EPPP despite some indifferent and positive stressors. Taking into consideration the dynamic nature of stressors, the pertinent issue to arise is the increase in job role and responsibilities such as increased administration, and the impact this has had on the coaches' lives outside of football. The results are important given the EPPP's focus to increase home-grown players; the consequence for coaches' delivery of this plan may have been overlooked. The Premier League and football clubs could consider the demands their coaches face and work towards providing appropriate levels of support for their coaches to potentially maximise performance, satisfaction and reduce staff turnover.

Chapter Five

STUDY 2

The review of organisational stress in sport (Chapter Two) and mixed methods research (Chapter Three) can be used to inform the rationale behind the purpose of Chapter Five. Moreover, the study described in the previous chapter identified a wide range of demands (i.e., stressors) that players and coaches encounter in academy football. From the themes identified in the previous chapter, it is clear that stressors and outcomes such as emotions (positive and negative) were important factors of the stress process. For example, balancing football and life negatively impacted players and changes in some aspects of job role and responsibilities were found to negatively impact coaches. Hence the purpose of Study 2 is to explore these aspects specifically and in more depth in order to understand the impact on players' and coaches' experiences of their environment. Furthermore, as identified by the first study, the same stressors described by players and coaches can differ in response. From a transactional stress perspective these stressors are part of a dynamic process and confirmed the need to further explore the components of the organisational stress process. It is acknowledged that pragmatically, researchers often focus their inquiries on specific components of the stress process rather than attempting to capture the whole phenomenon (cf. Arnold & Fletcher, 2012a; Lazarus, 1990). Hence the focus of Study 2 will be stressors, appraisals and emotion as further research is needed to examine these components to gain a better understanding of athletes' and coaches' experiences (Lazarus, 2000). Examining the components of the stress process longitudinally in Study 2 could identify factors present at different times of the season that interviews did not retrospectively.

Players' Stressors, Appraisals and Emotional Experiences in Academy Football Environments across a Season

5.1 ABSTRACT

The aim of this study was to explore adolescent football players' organisational stress experiences (stressors, appraisals, and emotions) of the football academy environments across a season. Thirty youth development phase players aged between 13–16 years completed one booklet of seven daily diaries at three phases of a season. Diaries included an open-ended responses section for participants to describe any negative and/or positive experiences, causes of those experiences, emotion felt during the experiences, and Likert scales of perceived intensity of the emotions and control of the experiences. Content analysis procedures were used to analyse the open-ended sections, and descriptive and inferential statistics were obtained for Likert scale sections of the diaries. Results revealed daily living and external interests as prominent stressors. Stressors were fairly controllable and predominantly caused by being part of the daily life routine or by the player. This highlights the importance of life outside of football upon the player. Happiness-joy, sadness-depression and anger were prominent emotions, where happiness was the most cited emotion throughout the season. Emotion intensities differed by phase of the season. However, stressor control and the order of prominent causes did not vary at different phases of the season. These findings suggest that applied practitioners could consider certain aspects of the organisational stress process are influenced by the timing of the season when providing support to players.

5.2 INTRODUCTION

The on-going transaction between an individual and the environmental demands associated with the sporting organisation the person is operating in is an important issue for performance and well-being (Fletcher & Wagstaff, 2009). To illustrate the prevalence of stressors as a salient component of the stress process in sport, Study 1 Part A (see Chapter Four) identified five themes of stressors to

be pressures and expectations, development and opportunities, a balancing act (football and life outside football), interaction and communication with significant academy others, and performing as a football player. As identified in the first study (Part A), the stressors described by players often can be experienced in different ways. For example, coach communication and the away match environment were responded to in a positive or negative manner. From a transactional perspective (Lazarus, & Launier, 1978), these stressors are part of a dynamic and complex stress process where responses result from appraising the relevance and meaning of a stressor ascribed to by the person and its significance for well-being (Hanton et al., 2012). Appraisals are influenced by the beliefs, values and/or goals of an individual (cf. Lazarus & Folkman, 1984), thus further demonstrating the inherent complexity of the stress process (Fletcher et al., 2006).

Literature examining the components of the organisational stress process in sport has a heavy focus on retrospective accounts of these experiences using interviews (Nicholls et a., 2006). Emerging research has taken aboard Nicholls et al.'s (2006) advice and employed longitudinal prospective designs using diaries in order to examine ongoing stress experiences to reflect the importance of contexts unfolding over time. This methodology has been used in various sports with the majority focusing on athlete experiences (e.g., Didymus & Fletcher, 2014); however, evidence surrounding the experiences of youth players in association football is limited.

Existing research has examined stressors, control, coping and coping effectiveness among early and middle adolescent players within a football academy using diaries (Reeves et al., 2011). Findings showed subtle stressor differences among mid-adolescent (e.g., injury) and early adolescent players (e.g., opponent cheating). Stressor frequency fluctuated across the season differently between groups. Age differences were also found in the coping strategies and their effectiveness as mid-adolescents used more emotion-focused and avoidance coping strategies and coped more effectively than early adolescent players. This study was the first to reveal important information about academy football players' organisational stress experiences across a season but did not consider the specific environments created for different age groups by the academy structure (e.g., foundation, youth development and professional development phase; The

Premier League, 2011). Hence this will be the first study to investigate organisational stress experiences of players within the youth development phase of the academy structure. Furthermore, players did not complete all four phases of the season (e.g., 40 players completed in phase 1, 33 players in phase 2, 30 players in phase 3, and 19 players in phase 4) and could not be analysed at the within-individual level to permit additional analyses over time. In addition, independent measures reduces the power of analysis since it does not take into consideration individual differences. This study will overcome these limitations by examining fluctuations over time using data by players who completed all parts of the study. Longitudinally examining the organisational stress across a season can further capture the specific changes in the stress process (Holt & Dunn, 2004; Nicholls et al., 2006). The current research builds upon previous organisational stress experience research by providing a deeper understanding of what affects youth development phase academy football players' experiences across a season.

Acknowledging the rationale for research in the area, the diary method has been used in various sports focusing on athlete experiences (e.g., Didymus & Fletcher, 2014). Literature within this area has investigated the relationships between the components of the stress process, namely appraisals of stressors (e.g., Didymus & Fletcher, 2012; Hanton et al., 2012); appraisals and coping strategies to stressors (e.g., Didymus & Fletcher, 2014); and stressors and coping (e.g., Nicholls et al., 2005; Nicholls & Polman, 2007). Lazarus (1999) stated that it is the process of appraising that gets to the essence of the stress process in sport. Furthermore, in line with athlete research examining different aspects of the organisational stress process (e.g., Hanton et al., 2012; Nicholls et al., 2010) and the notion that stress and emotions are inter-related psychological variables that should not be researched independently (Lazarus, 2000), future research is required to examine the cognitive appraisals and emotions generated throughout organisational experiences of athletes to facilitate a more complex examination of the athlete experiences. Hence, this study will build upon the previous chapter focussing on stressors to examine more of the individual elements of the stress process (stressors, appraisals and emotions) over time.

Having acknowledged the limitations of previous research methodologies and the required attention needed to fully understand the relational meaning

between stressors, appraisals and responses among elite youth football players, this study will use a diary method to examine longitudinally the organisational experiences (stressors, appraisals and emotions) amongst football academy players across a season. The aim is to interpret the adolescent players' organisational stress experiences (stressors, appraisals, emotions) of football academy environments within the youth development phase across a season. This will build upon Study 1's findings of players by further examining individual elements of the stress process and to see if these fluctuate over time.

Specifically, the objectives were to:

(a) identify and examine the stressors reported by players across a season,

(b) identify and compare the perceived control (appraisals) of stressors by players across the season,

(c) identify and examine the explanations (appraisals) of stressors by players across a season,

(d) identify and examine the emotions associated with stressors by players across a season,

(e) identify and compare the perceived intensities of emotions of players across the season.

No studies to date have looked at academy football club players' perceived control and perceived emotion intensity across a season for hypotheses to be informed. Therefore, the null hypotheses to be tested are as follows:

1. There will be no significant differences in players' perceived stressor control across the different phases of the season (Hyp1).
2. There will be no significant differences in players' perceived emotion intensities across the different phases of the season (Hyp2).

5.3 METHOD

5.3.1 Participants

160 male academy football players were purposively recruited from the youth development phase of five English football club academies. 130 players who initially agreed to take part did not complete diaries at all phases, so the sample comprised 30 players in total. Players were aged between 13 and 16 years (*M* age = 14.03 years, *SD* = 0.81) and had experience at their football academy ranging from 0.33 to 10 years (*M* = 5.23 years, *SD* = 3.04). Players' positions in a football game consisted of three goalkeepers, 9 defenders, 15 midfielders and three forwards. This is in keeping with similar research in this area (e.g., Didymus & Fletcher, 2012, 2014; Reeves et al., 2011) where 15-50 athletes were recruited.

5.3.2 Procedure

Upon institutional ethics approval, academy managers from five football clubs were contacted through existing networks already established and given details of the study and data collection process with an invitation to their players to participate in the study (see Appendix 13). Permission was granted from all football clubs and informed consent was sought from player's parents or guardians through each club (see Appendix 14-17). The players were given the option to attend a familiarisation session lasting approximately 15 minutes at a convenient time and location before the first data collection phase. The session aimed to increase participant adherence and provide assistance to what was required when completing the diary booklets. Of the initial 160 players who agreed to take part, 64 players participated in the familiarisation session whilst 96 players opted for the diary booklets to contain written examples of players' academy experiences to draw reference from.

Data were collected during the 2016/2017 season in three phases: early season (October and November), mid-season (January and February) and end of season (April and May). In each phase, participants received an individual diary booklet containing seven daily dairy sheets, running from Monday to Sunday (see Appendix 18). In all three phases, players were asked to complete the diary sheet at the end of each day, taking approximately 15 minutes. Diaries were distributed to each football club by the researcher in person at the beginning of each phase

and returned to the researcher in person at the end of each phase. Two pilot studies were conducted with academy football players not included in the sample and enabled the researcher to make minor refinements on the diary design (e.g., more space for written answers).

5.3.3 Diary booklet

The daily diary was adapted from the Stress Appraisal Log (Hanton et al., 2012), which monitors appraisals of organisational stressors and from the measure used by Reeves et al. (2011), which looked at stressors, stressor control, coping responses and coping effectiveness. The booklet consisted of participant demographics, instructions, the familiarisation session examples, and seven daily diary sheets. Specifically, the diary sheets consisted of a landscape table with five structured headings to identify and reflect the organisational-related demands they experienced. The five sections of the diary sheet comprised of (a) open-ended responses of positive and negative experiences, (b) open-ended responses of the causes of the experiences, (c) open-ended responses to the emotions of the experiences, (d) perceived intensity of the emotion, and (e) perceived controllability of each experience.

The first section consisted of five open-ended boxes in which participants had to write the positive and/or negative experiences throughout their day (e.g., “scored a goal in training”, “forgot English book for school”, “went out for a meal with mates”). The opened-ended boxes were included instead of the checklist included in Reeves et al.’s (2011) study. This was a way to reduce players answering into biased predisposed organisational stressors. This section investigates the stressors component of organisational stress theory which have been experienced by academy players. In section two, which was open-ended, required participants to write down what they perceived to be the cause of each experience. This section investigated the secondary appraisal component. Sections one and two were open-ended for players to expose meaning to the facets of the stress process rather than through checklists (adapted from Hanton et al., 2012). Section three, which was also open-ended, required players to write down how each experience made them feel at the time. This section investigates the emotion component of organisational stress theory. Perceived intensity of the emotion of each experience written in section three was measured in section four,

based on the non-standardised technique used by Kim and Duda (2003). The participants were asked “rate how strong your feeling was” on a 5-point Likert scale (1 = *not strong* and 5 = *very strong*). The final section required participants to rate how in control of the experience they felt using a 5-point Likert scale, with 1 = *no control* and 5 = *total control*. Section five was adapted from Reeves et al. (2011) and investigates the secondary appraisal component of the organisational stress theory.

The decision was made to separate the sections of the diary booklet into qualitative (sections one to three) and quantitative (sections four and five) aspects to provide contextual basis for the exploration of organisational stress components within academy football over a season and to provide means of exploring the scale of organisational stress components within academy football over a season. The qualitative aspects followed a methodology similar to Study 1, an interpretivist paradigm to discover the reality through participants’ views (Yanow & Schwartz-Shea, 2011). This fits within the overarching pragmatist paradigm of the research programme as it allows the research to identify players’ and coaches’ experiences of organisational stressors within academy environments. As outlined above, the interpretivist paradigm uses predominantly qualitative methods (e.g., Willis, 2007). Willis (2007) detailed the rich reports necessary for interpretivists to fully understand contexts were gained using qualitative approaches. Hence the use of open-ended sections within the diary booklet to expose meaning to the facets of the stress process (adapted from Hanton et al., 2012). The quantitative aspects followed a methodology similar to post-positivism to establish probable truth from empirical data from representative samples (Bunkers et al., 1996). This fits within the overarching pragmatist paradigm of the research programme as it allows the research to identify and compare the perceived control (appraisals) and emotion intensities of stressors by players across the season. Quantitative research methods are generally supported by the positivist paradigm (Ritchie et al., 2013). Hence, the use of Likert scales within section four and five of the diary booklet to determine if and to what extent predetermined study “variables” are related (e.g., time and control, time and emotion intensity).

5.3.4 Data analysis

The open-ended response sections of the diary booklet (Sections 1 & 2) were analysed using content analysis. This analysis is commonly used within sports sciences qualitative research (e.g., Reeves et al., 2011). Content analysis was used (instead of thematic analysis in Study 1) as it can analyse the data qualitatively and quantify the data (Gbrich, 2007). For example, in this study content analysis can code the interview data and find the frequencies of those codes. Firstly, all open-ended responses (Sections 1 & 2) were written up electronically by the principal researcher and read and re-read to increase familiarity with the data; individual meaning units were selected from the responses and grouped into initial codes. These initial codes were inductively sorted into lower- and higher-order themes and reviewed for further definition and refinement of each theme. In addition, emotions (Section 3) were deductively grouped as one of the 15 emotions proposed by Lazarus (1999). For each phase of the season the total number of each stressor, cause and emotion were tallied. Results for each phase of the season were then added together to calculate the season total for each stressor, cause, and each emotion.

The open-ended response data was analysed and interpreted using content analysis due to its flexibility and application across a range of theoretical and epistemological approaches, as well a robust approach for conducting an introductory study on a novel phenomenon (Vaismoradi et al., 2013). Content analysis is underlined by communication theory as a way to address the issue of interpretation (Graneheim & Lundman, 2004). It also takes a ‘factist’ perspective in which data is assumed to be more or less accurate (Sandelowski, 2010). In keeping with the realist method of applying context to meanings with content analysis (Morgan, 1993), the inductive approach was best suited. Inductive content analysis was used for the organisational stress and appraisal data (sections one and two). Inductive analysis allows a richer description and understanding of the data by allowing important dimensions to be identified without prior assumptions of what the dimensions will be. However, deductive content analysis was used for emotional descriptions. This approach for the study lies within the overarching paradigm of the research programme (pragmatism) due to the best data analysis method to fit the research question as it allows for

comparison to the underlying theory of the thesis and previous sports research using Lazarus' (1999) 15 identified emotions.

In line with Reeves et al. (2011) analysis of perceived control, the perceived emotion intensity and control scores (Sections 4 and 5) were calculated for the season and divided by the number of stressor citations. This process produced a mean for perceived emotion intensity and perceived control. This was calculated for every phase and also for the entire season. Quantitative sections of the diary were analysed descriptively and inferentially to test the stated hypotheses, which also falls within the post-positivist paradigm. Once again supporting the overarching paradigm of the research programme (pragmatism) due to the best data analysis method to fit the research question. One-way repeated measures analysis of variances (ANOVA) was used to compare players' perceived stressor control at the beginning, mid- and end of season. A separate repeated measures ANOVA was used to compare the perceived emotion intensity at the beginning, mid- and end of the season. The ANOVA was used to compare the same participants who provided data at more than two time points. One-way repeated measures ANOVA was used to look at the specific differences of perceived stressor control (dependent variable) between different phases of the season (independent variable with levels: beginning, mid and end). Participants did participate in all phases of the season. This analysis was also carried out for perceived emotion intensity. This study aims to identify the differences between two dependent variables over time not for a difference along a combination of dependent variables over time (multivariate analysis of variance). This falls in line with the research questions separately looking at specific components of the stress process (i.e., control and emotion intensity) over time. The data met the assumptions for the use of ANOVA. Parametric tests were used on questionnaire data due to three reasonings: a) the Likert scale items may be ordinal but the scales consisting of sums will be interval (Carifio & Perla, 2008); b) even if conceptually the Likert scale is ordinal, the extent theoretically the distance between the scale numbers are the same is irrelevant to the analysis as the computer has no way of verifying this (Gaito, 1980); and c) ANOVA is robust to non-normality and skewness (Norman, 2010). The assumptions checked were independence, normality and sphericity. All observations were independent. The Shapiro-Wilks test was used to check for normal distribution as it has more power

to detect differences from normality than the K-S test (Field, 2013). The Mauchly's test was used to check for sphericity. This tests the null hypothesis that the variances of the differences between conditions are equal. If the Mauchly's test was significant, there were significant differences between the variances of differences and therefore the condition of sphericity was not met. However, if the test was non-significant then it is reasonable to conclude the variances of differences were approximately equal. If sphericity was violated, the Bonferroni method seems to be the most robust of univariate techniques in terms of power and control of the Type I error (Field, 2013). Furthermore, adjusting the degrees of freedom for any F-ratios affected by the violation will control the Type I error rate (Fields, 2013). This is advocated by using Greehouse and Geisser (1959) and Huynh and Feldt (1976) estimates. It is recommended that when estimates of sphericity are greater than 0.75, the Huynh-Feldt estimate should be used, but when the Greenhouse-Geisser estimate is less than 0.75 or nothing is known about the sphericity, the Greenhouse-Geisser correction should be used. If sphericity is not violated, Tukey's test can be used (Field, 2013).

Effect sizes were also calculated. The P value informs the reader whether an effect exists or is due to chance but does not reveal the size of the effect. Effect size is the magnitude of the difference between groups, which is calculated when the measurements have no meaning (e.g., numbers on a Likert scale; Sullivan & Feinn, 2012). Sullivan and Feinn (2012) alongside the American Psychological Association (2009) suggested reporting the p value and effect size together for readers to understand the impact of the results. When a significant difference was found, the most common standard scored method (Cohen's *d*) of calculating the effect size was undertaken (Cano-Corres et al., 2012). The magnitude of the effect was classified using Hopkin's (2002) values. Cohen (1988) derived thresholds from non-overlapping distributions of values in the two groups resulting in the thresholds for moderate and large effects being recognised as too low (Hopkins, 2002). Effect sizes thresholds are as follows: trivial (<0.2), small (>0.2-0.6), moderate (>0.6-1.2), large (>1.2-2.0), and very large (>2.0-4.0; Hopkins, 2002).

5.4 RESULTS

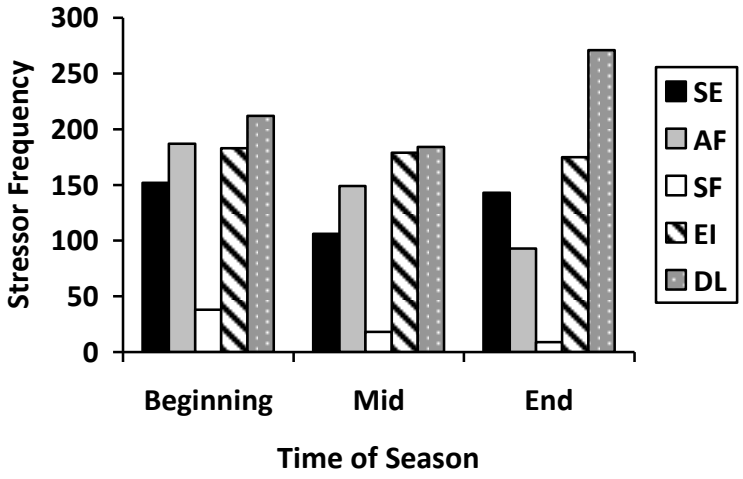
130 out of the 160 players withdrew from the study, thus the total data set were 30 players who completed all phases of the study, for a total of 572 days. Training days comprised 194 days, match days comprised 65 days and rest days comprised 313 days of the data collection period.

Thirty players completed a total of 90 daily diaries, from which a total of 2,099 experiences were reported. In total, 1,164 raw data codes emerged from the analyses pertaining to the experiences encountered. The codes relating to the experiences were organised into 33 lower-order stressor themes, which were then in turn organised into the following five higher-order stressor themes: school education, academy football, school football, external interests and daily living. The raw data codes describing the causes of the stressors were divided into 41 lower-order themes and seven higher-order themes: players' actions, other people's actions, aspects of academy football, aspects of school, doing activities, part of the daily living routine, and external factors. The raw data codes describing the emotions encountered during the stressors were divided deductively following Lazarus (1999) into 11 higher-order themes: sadness-depression, happiness-joy, anxiety-fright, gratitude, pride, relief, shame, anger, guilt, hope and love.

Stressors. The two most reported stressors among players were daily living (*n* = 667) and external interests (*n* = 537; see Table 5). The two most reported stressors accounted for 57% of all stressors reported. Players reported the most stressors at the beginning of the season (*n* = 772) and the least stressors at mid-season (*n* = 636; see Table 5). Figure 5 illustrates at the beginning daily living and academy football were the highest reported stressors. At mid- and the end of the season, daily living and external interests were the highest frequency stressors by players.

Table 5. Players' stressor frequencies total for each phase and the entire season

Stressors	Season Frequency	Phase 1 Frequency	Phase 2 Frequency	Phase 3 Frequency
Daily living	667	212	184	271
Academy football	429	187	149	93
External interests	537	183	179	175
School education	401	152	106	143
School football	65	38	18	9
TOTAL	2099	772	636	691



Where SE = School education, AF = academy football. SF = School football, EI = External interests and DL = Daily living experiences

Figure 5. Players' stressor frequencies for each phase of the season

Perceived Stressor Control. For the overall season, players were perceived to be in a fair amount of control of their stressors (*M* = 3.79, *SD* = 1.28; see Table 5.1). At the beginning, mid- season and end of season players were perceived to be in a fair amount of control of their stressors also (*M* = 3.85, *SD* = 0.60 for beginning; *M* = 3.89, *SD* = 0.63 for mid-, *M* = 3.63, *SD* = 0.69 for end).

Table 5.1 Players' mean perceived stressor control (*SD*) for the total and each phase of the season

	Mean Stressor Control	Standard Deviation
Phase 1	3.85	0.60
Phase 2	3.89	0.63
Phase 3	3.63	0.69
TOTAL	3.79	0.65

Perceived stressor control comparison between different phases of the season. Aforementioned perceived control findings revealed the descriptive statistics at different phases of the season. Perceived stressor control at different times of the season was also statistically analysed to look for differences over time.

Data at all phases of the season met the requirements for parametric inferential analysis: Perceived control scores at early (p = 0.74), mid- (p = 0.43), and end of season, (p = 0.70), did not deviate significantly from normal; and Mauchly's test indicated that the assumption of sphericity was assumed, x2(2) = 2.57, p = 0.28. Therefore, a one-way repeated measures ANOVA was used to analyse the data. There was no significant effect of time on perceived stressor control, F(2) = 2.41 , p = 0.10 (see Table 5.1.1).

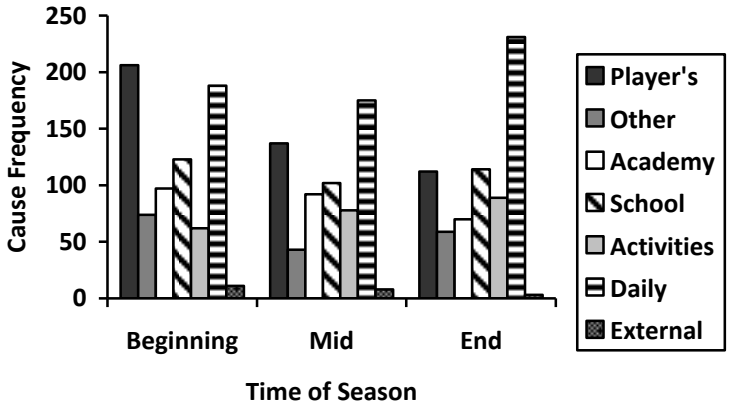
Table 5.1.1. One-way repeated measures analysis of variance of perceived control by academy players (data met parametric assumptions)

df	SS	MS	F	p
2	1.45	0.72	2.41	0.10

Cause. The two most reported causes among players were part of the daily living routine (*n* = 594) and player's action (*n* = 455; see Table 5.2). The two most reported causes accounted for 51% of all explanations cited. Figure 5.1 illustrates at the beginning of the season, players reported player's actions and part of the daily living routine as the highest reported frequency causes. However, at mid-season, part of the daily living routine and then player's actions were the highest. At the end of the season, part of the daily living routine and aspects of school were the highest reported frequency causes by players, closely followed by player's actions.

Table 5.2. Players' frequency cause total for each phase and the entire season

Cause	Season Frequency	Phase 1 Frequency	Phase 2 Frequency	Phase 3 Frequency
Part of daily living routine	594	188	175	231
Player's actions	455	206	137	112
Aspects of school	339	123	102	114
Aspects of academy football	259	97	92	70
Doing activities	229	62	78	89
Other people's actions	176	74	43	59
External	22	11	8	3
TOTAL	2074	761	635	678



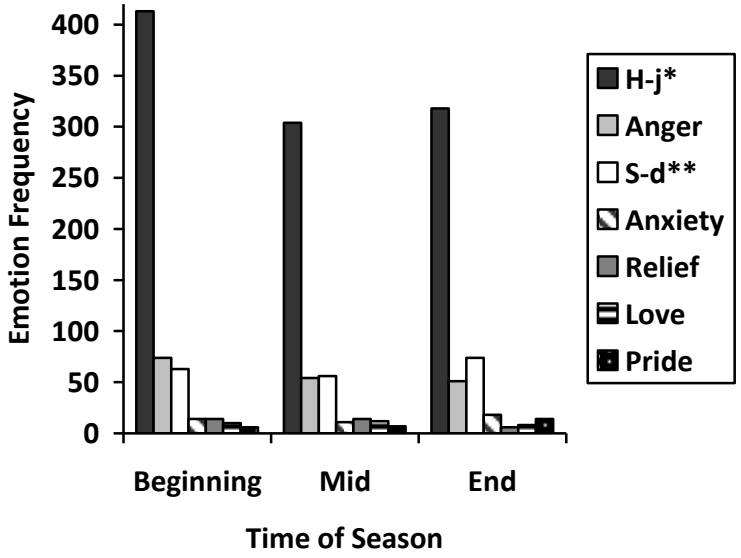
Where Player's = Player's actions, Other = Other people's actions, Academy = Aspects of academy football, School = Aspects of school, Activities = Doing activities, Daily = Part of daily living routine

Figure 5.1. Players' total cause frequencies for each phase of the season

Emotion. The three most reported emotions among category 1 players were happiness-joy (*n* = 1,035), sadness-depression (*n* = 193) and anger (*n* = 179). The three most reported emotions accounted for 91% of all emotions cited (see Table 5.3). Players experienced the highest number of emotions at the beginning of the season (*n* = 598) and the lowest number of emotions at mid-season (*n* = 461; see Table 5.3). Throughout the season, happiness was the most reported emotion by players (see Table 5.3). Figure 5.2 illustrates at the beginning of the season, anger was the second most reported emotion by players, whereas at mid- and the end of the season, sadness-depression was the second most reported emotion.

Table 5.3. Players' emotions frequencies total for each phase and the entire season

Stressors	Season Frequency	Phase 1 Frequency	Phase 2 Frequency	Phase 3 Frequency
Happiness-joy	1035	413	304	318
Sadness-depression	193	63	56	74
Anger	179	74	54	51
Anxiety-fright	43	14	11	18
Relief	34	14	14	6
Love	30	10	12	8
Pride	27	6	7	14
Shame	4	3	1	0
Gratitude	3	0	1	2
Hope	1	0	1	0
Guilt	1	1	0	0
TOTAL	1550	598	461	491



*Where H-j = Happiness-joy, **S-d = Sadness-depression

Figure 5.2. Players' emotion frequencies of the most reported 7 emotions for each phase of the season

Perceived Emotion Intensity. Perceived emotion intensity was fairly strong for the overall season (*M* = 3.93, *SD* = 1.02; see Table 5.4). At the beginning, mid-season and end of season, emotion intensity was fairly strong (*M* = 3.99, *SD* = 0.44 for beginning; *M* = 4.08, *SD* = 0.45 for mid-, *M* = 3.74, *SD* = 0.59 for end).

Table 5.4. Players' mean emotion intensity (*SD*) for the total and each phase of the season

	Mean Emotion Intensity	Standard Deviation
Phase 1	3.99	0.44
Phase 2	4.08	0.45
Phase 3	3.74	0.59
TOTAL	3.93	0.52

Perceived emotion intensity comparison between different phases of the season. Aforementioned perceived emotion intensity findings revealed the descriptive statistics at different phases of the season. Perceived emotion intensity at different times of the season was also statistically analysed to look for differences over time.

Data at all phases of the season met the requirements for parametric inferential analysis: Perceived emotion intensity scores at early ($p = 0.49$), mid- ($p = 0.27$), and end of season ($p = 0.58$), did not deviate significantly from normal; and Mauchly's test indicated that the assumption of sphericity was assumed, $x2(2) = 2.71$, $p = 0.26$. Therefore, a one-way repeated measures ANOVA was used to analyse the data. There was a significant effect of time on perceived emotion intensity, $F(2) = 5.37$, $p = 0.01$ (see Table 5.4.1). At mid-season, perceived emotion intensity ($M = 4.08$, $SD = 0.45$) was significantly higher than at the end of the season ($M = 3.74$, $SD = 0.59$, $p < 0.05$). The effect size for this analysis ($d = -0.65$ for mid- and end of the season) was found to fall in the threshold for a moderate effect.

Table 5.4.1. One-way repeated measures analysis of variance of perceived emotion intensity by players over the season (data met parametric assumptions)

df	SS	MS	F	p
2	1.84	0.92	5.37	0.01

5.5 DISCUSSION

The aim of the study was to explore adolescent players' experiences of the football academy environments within the youth development phase across a

season. The first objective was to identify and examine the stressors reported by players over three phases of a season. The study suggests football academy players experienced organisational, performance and personal related stressors through five higher-order themes of school education, academy football, school football, external interests, and daily living. These findings support Study 1 Part A and existing literature identifying a wide range of interacting factors that influence players (e.g., Reeves et al., 2011). For example, aspects of academy football such as training and match performance were stressors in Reeves et al.'s (2011) longitudinal study of academy players. The results extend Study 1 Part A by highlighting the importance of life outside of football for academy players such as school, school football, external interests, and daily living.

Previous organisational stress theory research with athletes has identified organisational, competitive, and personal stressors (Study 1 Part A; Potts et al., 2018). The findings of the present study also provide support for the origins of stressors (Hanton et al., 2005). For example, issues arising from school education, external interests, daily living and school football could be deemed as personal issues as they are not related to performance or the organisation. Furthermore, as seen in Study 1 Part A, these findings suggest that origins of stressors are not mutually exclusive. Stressors can be either or a combination of competitive, organisational and personal stressors. For example, issues arising from academy football stressors such as type of training session could be deemed as an organisational stressor and match performance could be deemed as a competitive stressor. Therefore, it is important for future research to recognise that stressors should be viewed as interlinked and not discrete variables. In support of the proposal from Study 1 Part A for sport performance and player development in youth sport to be considered as developmental stressors and competitive stressors to be redefined as issues directly related to competitive performance, the findings identified training performance as a possible developmental stressor and match performance and academy football match as possible competitive stressors.

Results also revealed daily living experiences and external interests experiences to be prominent stressors for players throughout the season. This further supports the findings from Study 1 Part A highlighting the importance of life

outside of football. In addition, the findings identified daily living and academy football as the most reported stressors at the beginning of the season, whereas for the mid- and end of season were daily living and external interest experiences. The beginning of the season may represent a time when the academy football stressors are most prominent due to the start of the games programme, and the increase of training from pre-season.

An additional finding from this study was the number of stressors reported varied at different phases of the season. This is in support of Reeves et al. (2011) who also reported stressor frequency to fluctuate across a season. Players reported the greatest number of stressors at the beginning of the season, whereas the lowest number of stressors was at mid-season. These findings highlight the need to use longitudinal research designs rather than one-off evaluations of organisational experiences due to the fluctuations that may occur. However, it cannot be concluded that a significantly greater frequency occurred at the beginning of the season due to no statistical analysis being performed. Results could suggest that the phase of the season is an important consideration for applied practitioners when delivering support for youth players. Yet, future research will need to compare frequencies between stressors at specific phases of the season statistically to determine if time influences the number of stressors players experience during a season.

The second objective of this study was to identify and compare the perceived stressor control by players across the season. A fair amount of stressor control was perceived by players for the total season and for each phase of the season. There were no significant effects of time on perceived stressor control cited by players over the three phases of the season. This support hypothesis one and suggests that players have similar control over stressors encountered throughout the season and time of the season does not influence players' control of a situation. Control can be in the form of primary control (direct action taken to affect the environment) or secondary control (action taken to affect one's own reaction to the environment; Rothbaum et al., 1982). Results suggest players believe they can determine their own experiences. Self-efficacy refers to the courses of actions needed to meet situational demands (Wood & Bandura, 1989). Players could have high self-efficacy levels throughout the season due to being

part of an elite level academy environment. Litt (1988) suggested self-efficacy is critical as it affects an individual's ability to control. Hence, players may be confident in their experiences and perceive higher control. Future research could investigate the types of stressors, levels of self-efficacy and situational properties within to provide a further understanding to if any certain stressor is more controllable than others.

The third objective of the study was to identify and examine the causes of stressors by players across a season. The study suggests football academy players explained the stressors occurrence through seven high-order themes of players' actions, other people's actions, aspects of academy football, aspects of school, doing activities, part of the daily living routine, and external factors. Results also revealed players reported part of their daily life routine and player's actions were prominent reasons for stressors to occur. This finding suggests the importance of routine in players' lives. Meaningful routines and rituals can provide a structure that guides behaviour and an emotional climate to support development (Spagnola & Fiese, 2007). In addition, results highlighted the importance of players believing that they are the reason for experiences to happen (which provides support for Searle's (1983) intentions-in-action theory). For example, the deliberate action is formed by prior intention by the individual.

The frequency in order of prominent causes did not vary across different phases of the season, except for the addition of aspects of school at the end of the season. For example, part of the daily living routine and player's actions were the most common stressor explanations throughout the season. Since the aspects of school explanation was the third prominent stressor explanation, this could highlight the influence of the environment causing stressors to occur, particularly the importance of school (as seen in Study 1 Part A). Overall, the time of the season did not seem to influence the order of prominent reasons for stressors to occur. From an applied perspective, by dealing with the prominent causes of stressors could be a way to reduce stressors from occurring if the outcome is perceived to have a negative effect on players.

The fourth objective of the study was to identify and examine the emotions associated with stressors by players across a season. The study suggests football academy players experienced emotions as a result of stressors through eleven

higher-order themes of sadness-depression, happiness-joy, anxiety-fright, pride, relief, shame, anger, guilt, gratitude, hope and love. The findings provide support to previous literature (Nicholls et al., 2010) that identifies sports performers to display a range of emotions but furthers the understanding that the range of emotions displayed is larger than previously identified (i.e., the addition of shame, guilt and love).

Results also revealed that happiness-joy, sadness-depression and anger were cited as prominent emotions for academy players. This partially supports previous emotion research in sports performers who have found happiness (Nicholls et al., 2010) and anger (Neil et al., 2011; Nicholls et al., 2010) as prominent emotions to result from stressors. According to Lazarus (1999) happiness would be referred to as an emotion provoked by favourable life conditions, sadness-depression as an emotion provoked by unfavourable outcomes, and anger as a nasty emotion. The findings suggest that despite the stressors appraised, similar emotions were felt by players. Hence, football academies influence players' emotion to be provoked by favourable life conditions, unfavourable outcomes and to be nasty. Specifically, happiness-joy has two meanings which is positive assessment of one's general well-being (Diener, 1984) and a strong emotional state provoked by events that show one's life is going well (Lazarus, 1999). The two meanings create confusion as to which the players are referring to when detailing stressor experiences. The core relational theme for anger is a "demeaning offense against me and mine" (Lazarus, 1999, p.232). Anger depends on the goal of preserving self-esteem with the appraisal-based meanings consisting of harm to the self and the assignment of blame. Hence academy environment stressors are appraised as the players blaming themselves for the offense to the goal, so anger is turned inward, or blaming another person where anger is directed outward. This could correspond with the appraisals of academy players who believe it is their own actions for the stressors to occur. Sadness-depression incorporates the core relational theme of experiencing a loss or the sense of hopelessness about restoring a life following a major loss (Lazarus, 1999). This suggests that academy environments present players with frequent experiences of loss. Only when the loss is accepted can the individual continue with their life. Depending on the relational meaning and how the stressor is appraised will determine the intensity and emotional struggle (Lazarus, 1999).

Players experienced the most emotions at the beginning of the season and the least emotions at mid-season. Furthermore, players reported happiness-joy to be the most cited emotion at all three phases of the season. Like Nicholls et al. (2010) who found positively toned emotions were the most frequently cited after favourable outcomes, this could suggest that players experienced favourable outcomes at all three phases of the season. Despite happiness being reported the most frequent emotion, differences between the order of frequencies of other prominent emotions may be affected by the time of the season. For example, anger was reported the most in the beginning of the season, whereas at mid- and the end of the season it was sadness-depression. Furthermore, the most emotions were reported at the beginning of the season with the fewest at mid-season. These findings highlight the need to use longitudinal research designs to capture the fluctuations that might occur. However, it cannot be concluded that a significantly greater frequency occurred at the beginning of the season due to no statistical analysis being performed. Results could suggest that timing is important for applied practitioners when delivering support to players. Nevertheless, it is important to note that players did cite one or more emotions with each stressor. These findings support previous research regarding people experiencing multiple emotions in any given stressful situation (Folkman et al., 1986) and within sport, players can experience more than one emotion simultaneously (Nicholls et al., 2010).

The fifth objective of the study was to identify and compare the perceived emotion intensities of players across the season. Perceived emotion intensity was fairly strong for the total season, and for each phase of the season. However, at the mid- and end of the season, there was a significant effect of time on perceived emotion intensity (mid-season was higher than the end of the season). This does not support hypothesis two and suggests that players' emotion intensity can vary across the season and time of the season does influence players' intensity of emotions. Consistent with the relational conceptualisation (Lazarus, 1999) these differences may reflect the different situational experiences at specific times that could have accounted for the varied emotion intensities at different phases of the season. It is important to note that respondent fatigue when completing the diaries might influence the reduction in emotion intensity. Participants' quality of data may deteriorate, such as players choosing the same emotion intensity column down the

page. However, when checking emotion intensity data, this was not the case. Furthermore, enough time was given between phases for players to not feel tired of completing the diaries and dairy design was structured for quick responses to be at the end of each day.

Results could suggest players may have a strong personal connection with football. Having relatedness is predictive of positive affects (Reiss et al., 2000) and having connectedness with the sport could give a sense of players' identity (McLean & Mallett, 2012). Therefore, the sense of belonging to a social group and remaining connected to the sport they love could maintain their connection with football and result in strong positive emotions. However, since participating in elite sport can be an inherently stressful occupation (Woodman & Hardy, 2001), it is not surprising that perceived negative emotions are also felt so strongly. Overall, all emotions are felt quite strongly. This is important for academy staff and players' significant others to consider when dealing with players' behaviour. Study 3 will explore the type of emotion and its intensity over time to further understand specific responses by players in academy environments.

A limitation of this study was the participant drop-out rate. Of the 160 players who agreed to take part only 30 players completed diaries for each phase of the season. The progression of the study saw withdrawals and missed phases from players due to being released from their club, deciding to withdraw from the study, forgetting to fill in the sections, or reduced buy-in from the gatekeepers to persist in collecting the data. The drop-out rate emulates other longitudinal research designs over different periods of time (e.g., Reeves et al., 2011). Steps were taken to maintain high completion rates across the season such as administering separate diary booklets, booklet drop off and collection at the football academies, and regular reminders from the researcher to the gatekeepers of the players.

In conclusion, this study has identified stressors appraised by academy players and highlighted the importance of life outside of football to be prominent stressors. Stressors were fairly controllable and were caused predominantly by being part of the daily life routine and the players themselves. Happiness-joy, sadness-depression and anger were prominent emotions, especially happiness since it was the most cited throughout the season. Furthermore, the amount of

stressor control and the order of most common explanations did not change at different phases of the season. However, the time of the season did influence emotion intensity. Number of stressors and emotions experienced did vary over a season, but statistical analysis would be needed to verify significant differences. These findings suggest the time of the season could have an important role to play in the organisational stress process. Applied practitioners could consider the timing of the season when providing support to players.

5.6 CONSIDERATION OF COACHES' ORGANISATIONAL STRESS ACROSS A SEASON

As discussed at the beginning of Chapter Five, there is a need to further explore organisational stress components over a season in Study 2. However, due to the limited sample of coaches within the youth development phase and recruited coaches for Study 2, inferential statistics to analyse the data over time could not be executed and so a descriptive analysis was included. Investigating organisational stress over time within coaches is deemed an important area of research (Nicholls et al. 2006). Yet there is still a lack of research examining this field, therefore, the following sub-section will begin to consider organisational stress components (stressors, appraisals, emotions) by coaches over a football season.

INTRODUCTION

The on-going transaction between an individual and the environmental demands associated with the sporting organisation the person is operating is an important issue for performance and well-being (Fletcher & Wagstaff, 2009). To illustrate the prevalence of stressors as a salient component of the stress process in sport, Study 1 Part B (see Chapter Four) identified three themes of stressors to be organisational changes, job role and responsibility changes, and the impact of job changes on coaches' lives. As identified in the first Study (B), the stressors described by coaches often can be experienced in different ways. For example, changes in staff numbers, academy structural changes, introducing a coaching

syllabus, 6-weekly reviews, time for coaching preparation and evaluation, and coach education issues were responded to in a positive or negative manner. From a transactional perspective (Lazarus, & Launier, 1978), these stressors are part of a dynamic and complex stress process where responses result from appraising the relevance and meaning of a stressor ascribed to by the person and its significance for well-being (Hanton et al., 2012). Appraisals are influenced by the beliefs, values and/or goals of an individual (cf. Lazarus & Folkman, 1984), thus further demonstrating the inherent complexity of the stress process (Fletcher et al., 2006).

Literature examining the components of the organisational stress process in sport has a heavy focus on retrospective accounts of these experiences using interviews (Nicholls et al., 2006). Emerging research has taken aboard Nicholls et al.'s (2006) advice and employed longitudinal prospective designs using diaries in order to examine ongoing stress experiences to reflect the importance of contexts unfolding over time. Although Study 1 Part B identified stressors perceived by coaches within the youth development phase of category 1-3 academies since the introduction of the EPPP, it does not necessarily mean these stressors will be experienced frequently. Longitudinal research, utilising a prospective design is required to examine frequency (Nichols et al., 2006). This methodology has been used in various sports with the majority focusing on athlete experiences (e.g., Didymus & Fletcher, 2014); however, evidence surrounding the experiences of sports coaches is limited.

Existing research has examined organisational stressors, coping and perceptions of coping effectiveness using a diary with one aquatic coach over a period of 28 days (Levy et al., 2009). Results found that administration, overload, team atmosphere, competition environment and the athletes were salient stressors. Coping strategies to alleviate the aforementioned stressors were self-talk, social support, preparation, planning, and communication, which were generally effective but declined over time. This study was the first to reveal important information about a coach's organisational stress experiences over time, but from a single participant and at one specific phase of the sport season. The current research builds upon previous organisational stress experience research

amongst coaches by providing a deeper understanding of what affects coaches' experiences across a football season.

With these advancements of research looking into components of the organisational stress experience, Lazarus (1999) stated that it is the process of appraising that gets to the essence of the stress process in sport. Hence in line with athlete research (e.g., Hanton et al., 2012; Nicholls et al., 2010), future research is also required to examine the cognitive appraisals of the organisational stressors coaches encounter. Furthermore, Lazarus (2000) went further to suggest that stress and emotions were inter-related psychological variables that should not be researched independently. Given the pivotal importance of appraisal in stress transactions (Lazarus, 1999), researchers should make this concept a focus of future research with coaches (Norris et al., 2017).

Dixon and Turner (2018) investigated 10 UK football academy coaches' appraisals of stress and the stressors experienced. IPA was used to examine coaches' responses from semi-structured interviews. Within the interviews, coaches were asked to rank stressful situations they identified in order of prominence. Analysis revealed three superordinate themes to be evaluation of situational demands, evaluation of coaches' personal resources, and coaches' emotional and behavioural responses. Despite adding to stress appraisal literature by highlighting the interdependent and interactive nature of appraisal determinants, behavioural responses cannot be directly related to the appraisal process in this study. Future research would have to investigate more directly the appraisals and responses to demanding situations. Furthermore, seven coaches were full-time, two were part-time and one managed a community coaching programme. Of the full- and part-time participants they coached at the foundation and youth development phases. Since specific environments within the academy phases have been created for players' development (The Premier League, 2011) and that different sport coaches' employment bases impact various psychological constructs (Potts, Didymus & Kaiseler, 2018) were not taken into consideration, future research could consider these to reduce variation of results.

Having acknowledged the limitations of previous research methodologies and the required attention needed to fully understand the relational meaning between stressors, appraisals and responses amongst coaches, the aim of this

research was to explore coaches' organisational stress experiences (stressors, appraisals and emotions) of the football academy environments within the youth development phase across a season. A diary method was used to capture the experiences longitudinally.

Specifically, the objective was to:

- Identify and examine the organisational stressors, perceived controllability, associated explanations, emotions, and emotion intensities reported by coaches across a season.

METHOD

Participants

Fifteen full-time male football coaches were purposively recruited from the youth development phase of five English football club academies. The sample comprised seven coaches from two Category 1, six coaches from two Category 2, and two coaches from one Category 3 football clubs. Similar research in this area e.g., Levy et al. (2009) only investigated one elite coach, therefore Study 2 Part B has recruited an increased number of coaches which is in keeping with similar athlete longitudinal studies (e.g., Didymus & Fletcher 2012, 2014). Coaches were aged between 27 and 44 years (*M* age = 38.53 years, *SD* = 8.65), held the minimum of a UEFA B licence and had between 2 and 17 years (*M* = 7.27 years, *SD* = 4.65) experience coaching within a football academy setting.

Procedure

Upon institutional ethics approval, academy managers from five football clubs were contacted through existing networks already established for permission to invite coaches to participate in the study. After achieving permission from all football clubs, information regarding details of procedures and securing informed consent were provided prior to data collection (see Appendix 19 and 20). Coaches were assured that all information would remain anonymous and confidential. The participants were given the option to attend a familiarisation session lasting approximately 15 minutes at a convenient time and location before the first data

collection phase. The session aimed to increase participant adherence and provide assistance to what was required when completing the diary booklets. 11 coaches participated in the familiarisation session whilst four coaches opted for the diary booklets to contain written examples of coaching experiences to draw reference from.

Data were collected during the 2016/2017 season in three phases: early season (October and November), mid-season (January and February) and end of season (April and May). In each phase, participants received an individual diary booklet containing seven daily dairy sheets, running from Monday to Sunday (see Appendix 21). In all three phases, coaches were asked to complete the diary sheet at the end of each day, taking approximately 15 minutes. Diaries were distributed to each football club by the researcher in person at the beginning of each phase and returned to the researcher in person or via mail at the end of each phase. Two pilot studies were conducted with academy football coaches, not included in the sample, which enabled the researcher to make minor refinements on the diary design, structure and questions (e.g., more space for written answers).

Data collection and analysis

The same data collection and analysis were used as Study 2. Inferential statistics were not used since the sample size was not large enough for mean comparisons of control and emotion intensity across the three phases of the season.

RESULTS

Four of the 15 participants withdrew from the study, thus the total data set were 11 coaches (*M* age = 38.91 years, *SD* = 9.42; *M* experience = 7.82 years, *SD* = 5.19) who completed at least one phase of the study, for a total of 133 days (see Table 5.6). Coaching associated days comprised 77 days, match days comprised 25 days and rest days comprised 31 days of the data collection period. Of the 11 coaches, seven completed the early season phase (64%), six completed the mid-season phase (55%), while six completed the end of season phase (55%).

Overall, out of the 33 diaries that were distributed over the season, 19 were returned (58%).

Coaches completed a total of 133 daily diaries, from which a total of 313 experiences were reported. In total, 225 raw data codes emerged from the analyses pertaining to the experiences encountered. The codes relating to the experiences were organised into 25 lower-order stressor themes, which were then in turn organised into the following five higher-order stressor themes: external, player, job roles and responsibilities, match day, and people associated with the coaching job. The raw data codes describing the causes of the stressors were inductively divided into 17 lower-order themes and five higher-order themes: people at work, people outside of work, the coach doing it for themselves, job requirements, and external factors. The raw data codes describing the emotions encountered during the stressors were divided deductively following Lazarus (1999) into 10 higher-order themes: anger, sadness-depression, relief, happiness, pride, anxiety-fright, shame, guilt, gratitude, and compassion.

Stressors. The two most reported stressors among coaches were job role and responsibilities (*n* = 136) and external (*n* = 105; see Table 5.5). The two most reported stressors accounted for 77% of all stressors reported. Coaches reported the most stressors at the beginning of the season and the least at the end of the season (see Table 5.5). Figure 5.3 illustrates at the beginning, mid- and end of season, the highest reported mean frequency stressors reported by coaches were job role and responsibilities and then external stressors.

Table 5.5 Coaches' stressor frequencies total for the season and mean stressor frequency for each phase of the season

Stressors	Season Frequency	Phase 1 Mean Frequency	Phase 2 Mean Frequency	Phase 3 Mean Frequency
Job roles & responsibilities	136	9.14	6.17	5.83
External	105	8	4.83	3.33
Match day	31	1.57	1	2.33
People AWJ*	21	1.14	1.5	0.67
Player	20	0.57	1.83	0.83
TOTAL	313	20.43	15.33	13

* People AWJ* = People associated with the job

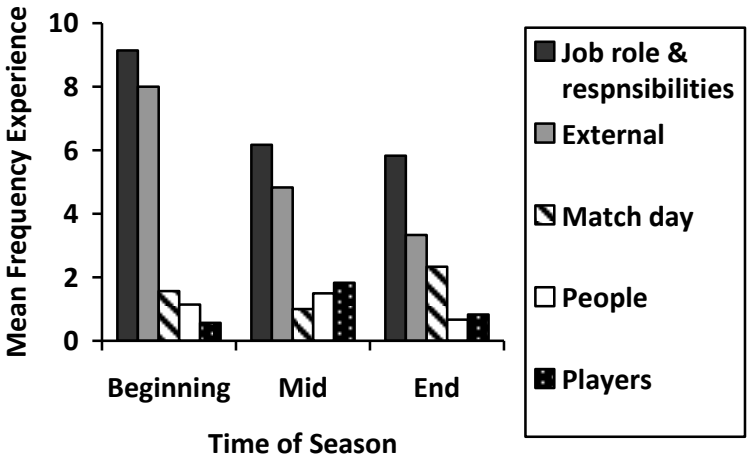


Figure 5.3. Mean stressor frequency reported by coaches over three phases of a season.

Perceived Stressor Control. For the overall season, coaches were perceived to be in a fair amount of control of their stressors (*M* = 3.59, *SD* = 1.33; see Table 5.6). At the beginning and end of season, coaches were perceived to be in a fair amount of control of their stressors also (*M* = 3.72, *SD* = 1.25 for beginning; *M* = 3.84, *SD* = 1.26 for the end). However, at mid-season, coaches were perceived to be in moderate control of their stressors (*M* = 3.16, *SD* = 1.42).

Table 5.6 Coaches' mean perceived stressor control (*SD*) for the total and each phase of the season

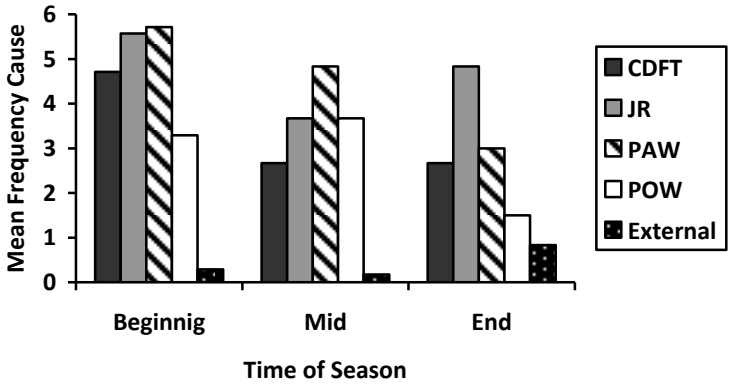
	Mean Perceived Stressor Control	Standard Deviation
Phase 1	3.72	1.25
Phase 2	3.16	1.42
Phase 3	3.84	1.26
TOTAL	3.59	1.33

Cause. The two most reported causes among coaches were job requirements (*n* = 90) and people at work (*n* = 87; see Table 5.7). The two most reported causes accounted for 58% of all explanations cited. Figure 5.4 illustrates at the beginning and mid-season, coaches reported people at work as the highest reported mean frequency cause followed by job requirements. At mid-season people outside of work had the same frequency as job requirements. At the end of

the season, job requirements was reported the highest mean frequency cause by coaches, followed by people at work.

Table 5.7. Coach cause frequency for the season and mean cause frequency for each phase of the season

Cause	Total Frequency	Phase 1 Mean Frequency	Phase 2 Mean Frequency	Phase 3 Mean Frequency
Job requirements	90	5.57	3.67	4.83
People at work	87	5.71	4.83	3.00
Coaches doing it for themselves	65	4.71	2.67	2.67
People outside of work	54	3.29	3.67	1.50
External	8	0.29	0.17	0.83
TOTAL	304	19.57	15.00	12.83



Where CDFT = Coaches doing it for themselves, JR = Job requirements, PAW = People at work, POW = People outside of work

Figure 5.4. Mean cause frequencies for the stressor explanations by coaches over the season

Emotion. The three most reported emotions among coaches were happiness (*n* = 219), sadness-depression (*n* = 59) and anger (*n* = 34). The three most reported emotions accounted for 87% of all emotions cited (see Table 5.8). Coaches experienced the most emotions at the beginning of the season (*M* = 24.86) and the fewest emotions at the end of the season (*M* = 11.17; see Table 5.8). Throughout the season, happiness was the most reported emotion by coaches (see Table 5.8). Figure 5.5 illustrates anger was the second most reported emotion by coaches throughout the season. Sadness-depression was the third most reported emotion at the beginning of the season (*M* = 2.71) and the end of the season (*M* = 1.17). However, at mid-season, pride was the third most reported emotion (*M* = 1.83).

Table 5.8. Coaches' total emotion frequencies and mean emotion frequency for entire season

Emotion	Total Frequency	Phase 1 Mean Frequency	Phase 2 Mean Frequency	Phase 3 Mean Frequency
Happiness	216	16.14	9.83	7.33
Anger	59	3.43	3.67	2.17
Sadness-depression	34	2.71	1.33	1.17
Anxiety-fright	14	0.43	1.33	0.5
Proud	14	0.42	1.83	-
Gratitude	8	1.14	-	-
Relief	4	0.43	0.16	-
Shame	2	-	0.33	-
Compassion	2	0.14	0.17	-
Guilt	1	-	0.17	-
TOTAL	354	24.86	18.83	11.17

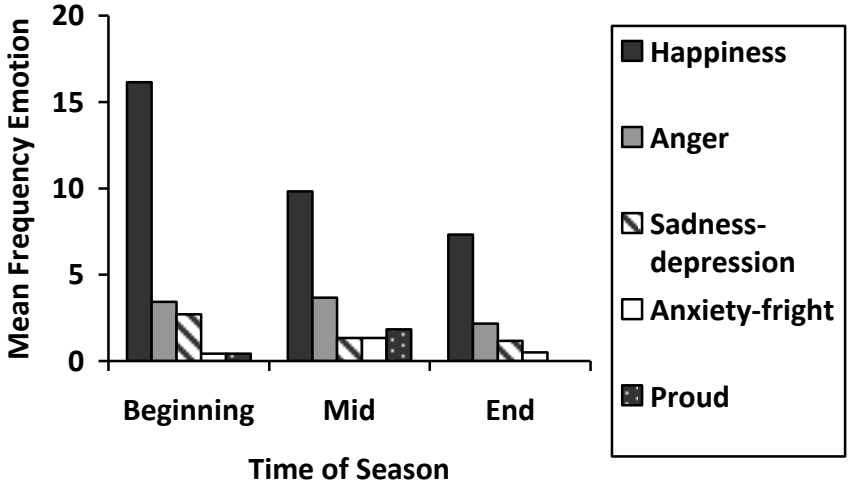


Figure 5.5. Mean emotion frequencies of the most reported five emotions reported by coaches during the three phases of the season

Perceived Emotion Intensity. The reported emotions by coaches were felt fairly strongly (*M* = 4.18, *SD* = 0.88; see Table 5.9). At the beginning, mid- and end of the season, emotions were felt at a fairly strong intensity also.

Table 5.9. Mean emotion intensity and standard deviation (*SD*) for the entire and each phase of the season

	Total Mean (*SD*)	Phase 1 Mean (*SD*)	Phase 2 Mean (*SD*)	Phase 3 Mean (*SD*)
Mean Emotion Intensity	4.18 (0.88)	4.19 (0. 90)	4.09 (0.88)	4.33 (0.82)

DISCUSSION

The aim of the study was to explore coaches' organisational stress experiences of the football academy environment within the youth development phase across a season. The first element of the objective was to identify and examine the stressors reported by coaches over three phases of a season. The study suggests football academy coaches experienced organisational, performance and personal related stressors through five higher-order themes of job role and responsibilities, external, match day, player and people associated with the job. These findings support existing literature identifying a wide range of interacting factors that influence coaches (e.g., Dixon & Turner, 2018; Levy et al. 2009). For example, findings concerning external experiences such as time with family (Lundkvist et al., 2012), and player experiences such as player discipline were stressors also seen in Levy et al.'s (2009) longitudinal study of a coach.

Previous organisational stress theory research with sports coaches have identified performance related and organisational stressors (Dixon & Turner, 2018; Levy et al., 2009; Thelwell et al. (2008). The findings of the present study also provide support for the origins of stressors (Hanton et al., 2005). For example, issues arising from match day stressors, such as match results or issues arising from player experiences such as player performance could be directly related to coach's or the player's performance and be deemed as a performance stressor, and job role and responsibility stressors could be seen as organisational stressors. Expanding upon previous findings, this study identified external experiences as stressors, which could be deemed as personal stressors as they are not related to performance or the organisation. Hence supporting Study 1 Part B's findings of personal stressors also being present in sport coaches' experiences.

Results also revealed job role and responsibility and external experiences were prominent stressors among coaches. These stressors were the most prominent at all phases of the season. This supports previous coaching longitudinal research (Levy et al., 2009) where job role and responsibility experiences such as administration have been found to be frequent. This similarity may reflect the increased importance of the coaches' job role and responsibilities in all academies. For example, the introduction of the EPPP has seen an increased amount of required administration to be completed by the coaches on

the Performance Management Application (PMA; see Study 1 coaches). In addition, the regularity of external experiences highlight the importance of life outside of football for coaches. This supports results found in Study 1 Part B and research by Didymus (2017), Frey (2007), Olusoga et al. (2009) and Thelwell et al. (2008).

A unique finding from this research was that the mean number of stressors reported varied across different phases of the season. Coaches reported the greatest number of stressors at the beginning of the season and the least at the end of the season. These findings highlight the need to use longitudinal research designs to capture the fluctuations that might occur. However, it cannot be concluded that a significantly greater frequency occurred at the beginning of the season due to no statistical analysis being performed. Results could suggest that timing is important for applied practitioners when delivering support to coaches. Future research will need to compare frequencies between stressors at specific phases of the season statistically to determine if time influences the number of stressors coaches experience during a season.

The second element of the objective was to identify and examine the perceived stressor control among coaches across the season. A fair amount of stressor control was perceived by coaches for the total season and for the beginning and end of the season. However, at mid-season coaches felt they were in moderate control of their stressors. Results suggest coaches believe they can determine their own experiences and believe they have knowledge and skills to meet demands. Perceived control is beneficial as it is associated with positive emotions, reduces anxiety, buffers against negative physiological responses, and leads to active problem solving (Synder & Lopez, 2002). Nevertheless, at mid-season, coaches felt moderately in control of their stressors. It could be that coaches' may feel less autonomous at this point in the season. Dixon and Turner (2018) found coaches to discuss restrictive organisational practices that could foster negative appraisals. If necessary, sports psychologists could help coaches achieve a higher sense of control. For example, using the control heuristic approach, if the coach intends an outcome and can see a connection between their action and the outcome, control will be higher (Thompson et al., 1998). No studies to date have looked at perceived control within coaches, but this study

highlights the time of the season might influence a coach's control of a situation. However, it cannot be concluded that perceived control significantly differs across the season particularly at mid-season due to no statistical analysis being performed Future research would be needed to explore perceived control using a within-subjects approach across a season.

The third element of the objective was to identify and examine the causes of reported stressors by coaches across a season. The research suggests academy coaches explained the stressors occurrence through five higher-order themes of job requirements, people at work, coaches doing it for themselves, people outside of work and external reasons. No studies to date have looked at sport coaches' reasons for stressors to occur, therefore the results further the understanding of how coaches appraise the stressors over a season. Results also revealed job requirements and people at work as prominent causes. This highlights the influence of the environment causing stressors to occur, particularly the importance of the job role (as seen in Study 1 Part B) and the importance of work colleagues such as athletes, support staff, managers and administrators in causing psychological stress or being sources of social support for coaches (see Fletcher & Scott, 2010).

The mean cause frequency order of prominent causes varied a little at each phase of the season. For example, the highest frequency cause was people at work for the beginning and mid-season, followed by job requirements, whereas, at the end of the season, the order was reversed. This suggests that the time of the season may influence the prominent reasons for stressors to occur. Once again, statistical analysis would need to be performed to state if causes significantly change over time. However, the results once again highlight the importance of work colleagues (see Fletcher & Scott, 2010) and job role (Study 1 Part B) at every phase of the season. From an applied perspective, dealing with the prominent causes of stressors could be a way to reduce stressors from occurring if the outcome is perceived to have a negative effect on coaches.

The fourth element of the objective was to identify and examine the emotions of reported stressors among coaches across a season. The research suggests football academy coaches experienced emotions as a result of stressors through ten higher-order themes of happiness, anger, sadness-depression,

anxiety-fright, proud, gratitude, relief, shame, compassion, and guilt. The specific range of emotions that coaches experience through coaching has not been identified definitively in research (Davis & Davis, 2016). Hence, this research has furthered understanding of the range of emotions coaches experience in sport. In relation to theory, the findings suggest that all category coaches appraised the stressors as of personal significance for well-being (Lazarus, 1982).

Results also revealed happiness-joy, sadness-depression and anger were prominent emotions felt by coaches. This supports previous academy football research which has found both positive (e.g., enjoyment, which is part of Lazarus' (1999) identified emotion of happiness provoked by favourable life conditions) and negative emotions (e.g., anxiety) to result from stressors (Dixon & Turner, 2018). However, in other sports anger has been identified in the sporting process (Keegan et al., 2009). As discussed in relation to players, happiness would be referred to as an emotion provoked by favourable life conditions, anger would be referred to as a nasty emotion, and sadness-depression as an emotion provoked by unfavourable outcomes (Lazarus, 1999). The findings suggest football academies influence coaches' emotions to be provoked by favourable life conditions and numerous unfavourable outcomes in which there is a sense of loss or hopelessness. The academy environment also influences self-esteem with the appraisals of coaches results in blaming themselves or another person for the stressor.

Coaches reported the most emotions in the early season whereas the least emotions resulted at the end of the season. These findings highlight the need to use longitudinal research designs to capture the fluctuations that might occur. However, it cannot be concluded that a significantly greater frequency occurred at the beginning of the season due to no statistical analysis being performed. Results could suggest that timing is important for applied practitioners when delivering support to coaches from different academy statuses. Nevertheless, it is important to note that coaches did cite one or more emotions with each stressor. These findings support previous research regarding people experiencing multiple emotions in any given stressful situation (Folkman et al., 1986) and within sport, players can experience more than one emotion simultaneously (Nicholls et al., 2010), but the findings also extend the literature by reporting that coaches can

also report different emotions within the same stressor experience. Furthermore, happiness-joy was reported the most frequent emotion by coaches throughout the season, with anger the second most frequent. In relation to Lazarus (1999), this suggests that the academy experience throughout the season is full of favourable life conditions resulting in positive assessments of one's general well-being (Diener, 1984) or a strong emotional state provoked by events that show one's life is going well (Lazarus, 1999). However, throughout the season coaches also appraise a lot of experiences as offensive against the coach, resulting in anger inward or outward.

The fifth element of the objective was to identify and examine the perceived emotion intensities among coaches across the season. Emotion intensities reported by category coaches seem to be being fairly strong. Emotions could be felt strongly since the coaches may have a strong personal connection with football. A connection with the sport is seen as a dominant reason for coaches to continue to coach (McLean & Mallett, 2012). By a coach having relatedness is predictive of positive affect (Reiss et al., 2000) and having connectedness with the sport could give a sense of the coaches' identity (McLean & Mallett, 2012). Therefore, the sense of belonging to a social group and remaining connected to the sport they love could maintain their connection with football and result in strong positive emotions. However, since sports coaching can be an inherently stressful occupation (see Norris et al., 2017), it is not surprising that perceived negative emotions are also felt so strongly. Like athlete research, these findings also suggest that positive emotions can be experienced during the organisational stress process (e.g., Nicholls et al., 2009) and the intensity of positive emotions can be higher than the other emotions (e.g., Nicholls et al., 2009). Results also found emotion intensity remained fairly strong for each emotion throughout the season for academy coaches. This could suggest that time of the season did not influence emotion intensity. However, it cannot be concluded that there was no significant variation in emotion intensity over a season due to no statistical analysis being performed. Future research could explore emotion intensity by comparing emotion intensity statistically at each phase of the season and the factors that underpin coaches experiencing positive and negative emotions in sport settings e.g., stressor situational properties.

A limitation of this research was the participant drop-out rate. Of the 15 coaches who agreed to take part only 11 coaches completed at least one diary booklet. For example, seven, six and six coaches completed diaries for the early season, mid-season and end of season phases respectively. The progression of the study saw withdrawals and missed phases from coaches. The drop-out rate emulates other longitudinal research designs over different periods of time (e.g., Reeves et al., 2011). Steps were taken to maintain high completion rates across the season such as administering separate diary booklets, and regular reminders from the researcher (e.g., Nicholls et al., 2011). However, the drop-out rate highlights the reality of collecting longitudinal data in professional sport organisations. This study has included data from participants who have not completed all phases of the study but completed the diary booklet for the particular phase(s). This falls in line with previous longitudinal research which has included data from participants that did not complete all parts of the study (e.g., Nicholls et al., 2009, 2011). An additional limitation is that the data were not analysed at the within-individual level, which would have been beneficial to allow a more in-depth understanding of the experiences fluctuating over time. For example, comparing coaches over time and exploring further specific stressor control, causes, emotion and intensities. However, an increase in participant numbers would be needed to allow sufficient analysis, which is difficult due to the sample size of category 1-3 coaches within the youth development phase.

In conclusion, the research has identified stressors appraised by academy coaches and highlighted that coaches reported job role and responsibilities and external experiences as prominent stressors across the season. Overall, stressors were perceived as fairly controllable, and coaches perceived job requirements and people at work to be the main explanations of stressors across the season. Happiness-joy, sadness-depression and anger were prominent emotions felt by coaches, where happiness-joy and anger where the most cited at each phase of the season. Intensities of emotions cited by coaches were fairly strong across the season. The number of stressors, emotions experienced, and perceived stressor control varied across the season, but statistical analysis would be needed to verify significant differences. These findings suggest the time of the season could have an important role to play for some aspects of the organisational stress process in academy football, but further research is needed. These findings suggest that

applied practitioners could possibly consider high intense emotions and the period of the season when offering coach support.

Chapter Six

STUDY 3

The previous studies have explored and identified players' perceptions and experiences of their environment with an introduction in exploring coaches' perceptions and their experiences over time. Specifically, stressors (such as balancing academy football and life outside football, and job role and responsibilities), appraisals (players' stressors were fairly controllable over time and were caused by being part of the daily living routine and the players themselves, whereas coaches' stressors were caused by job requirements and people at work), and emotions (such as happiness-joy, sadness and anger were felt fairly strongly), provide examples that have been found to be particularly key aspects. It has been identified from the findings of the previous studies that the greatest variation in stressors and emotions (including their intensity) was found in the adolescent players. These also varied across different phases of the season. Furthermore, with the lack of recruitment and limited numbers of youth development phases coaches, the next phase of investigation for coaches, falling in line with the players' studies, could not take place. Study 3 will build upon Study 1 and 2 by investigating aspects identified as important in the studies' findings and additional components of the stress process. Standardised inventories appropriate for ease and speed in elite sport were used to potentially corroborate previous thesis findings and determine the scale of the stress process components (which qualitative methodology cannot). This will lead to a greater understanding of the stress process in adolescent players within academy football. It was decided to therefore identify adolescent players' situational properties of organisational stressors, emotions, and recovery-stress of football academy environments within the youth development phase across a season.

Organisational Stressor Situational Properties, Emotion and the Recovery-Stress of Academy Football Players Across a Season

6.1 ABSTRACT

The aim of this study was to explore adolescent players' situational properties of organisational stressors, emotion, and recovery-stress of football academy environments within the youth development phase across a season. It is proposed there would be no significant differences in the organisational stressors' frequencies, intensities and duration across a season (Hypothesis 1); there would be significant differences in emotions across the season (Hypothesis 2); and there would be significant differences in recovery-stress aspects across the season (Hypothesis 3). Players were recruited from English football club academies with EPPP category rating of 1 to 3. Sixteen youth development phase players aged between 14–16 years completed three questionnaires across three phases of a season. The questionnaires included the Organisational Stressor Indicator for Sports Performers (OSI-SP, Arnold et al., 2013), the Sport Emotion Questionnaire (SEQ; Jones et al., 2005) and the Rest and Recovery Questionnaire (RESTQ-52, Kellmann & Kallus, 2001). Results revealed organisational stressors to be rare, hardly intense and occur only for a short time; emotions were felt a little, stress to be low and recovery to be medium. Time significantly influenced all team and culture stressor situational properties, selection stressor frequency (situational properties); dejection, happiness, excitement (emotions); fitness/being in shape and burnout/personal accomplishment (sport-specific and global recovery). Findings provided further understanding regarding fluctuations in components of the stress process over time, particularly at the end of a football season. Methodological issues were also considered.

6.2 INTRODUCTION

Elite youth association football players encounter a wide range of demands within the academy environment they are operating in (Mills et al., 2014; Reeves et al., 2009, 2011). This can be seen in Chapter Two detailing organisational

stressors and the performance environment in football alongside Study 1 Part A and Study 2. It has been stated that sport associated demands can have a number of performance-related and psychosocial effects such as overtraining, poor psychological health, burnout, underperformance, commitment, and satisfaction (e.g., Fletcher et al., 2012a). With reference to the transactional perspective of stress, organisational stressors arise from the sport organisation; are mediated by perception, appraisal and coping, and result in positive or negative responses, outcomes and feeling states. Lazarus' perspective encourages the study of the sequential process and so with this in mind, this study will focus on the important aspects identified in Study 1 and Study 2 players' findings by identifying the situational properties of stressors and emotions, and identifying the recovery-stress outcomes of players, which is warranted within football (Faude et al., 2011).

A significant body of research has focused on detailing organisational stressors in sport performers with the tendency to use interview methods to provide in-depth information (Arnold & Fletcher, 2012a). Fletcher and Hanton (2013) believed that in order to make significant advances in the understanding of organisational stress a valid and reliable measurement tool must be designed. Consequently, in a research meta-synthesis Arnold and Fletcher (2012b) developed a taxonomic classification of organisational stressors in varied athletic contexts. These demands comprised four main categories: Leadership and Personnel issues, Cultural and Team issues, Logistical and Environmental Issues, and Performance and Personal issues (Arnold & Fletcher 2012b). This research provided the foundation for developing a measure assessing one of the components of the organisational stress process. Arnold et al. (2013) developed and validated a measure called the Organisational Stressor Indicator for Sport Performers (OSI -SP). The OSI-SP measures the frequency, intensity and duration of organisational stressor experiences by sport performers in five organisational domains: goals and development, logistics and operations, team and culture, coaching, and selection. Current research utilises this measurement on athletes from a wide range of sports and professional levels examining organisational stressors alongside appraisal and basic psychological needs (Bartholomew et al., 2017), psychological resilience and burnout (Wagstaff et al., 2018), emotional labour, burnout and turnover (Larner et al., 2017) and coping and positive/negative affect (Arnold et al., 2017). Arnold et al. (2017) found certain organisational

stressors (goals and development duration and intensity; team and culture frequency and intensity) had a main positive effect on negative affect and yet no significant effect of organisational stressors on positive affect within individuals from 34 different sports However, there has been no research to date that has utilised the OSI-SP specifically within a football environment. This current study will use the OSI-SP to measure the situational properties of organisational stressors within academy football.

Sport psychology researchers have begun to explore sports performer's emotional responses to their organisational environment. For example, Fletcher et al. (2012a) reported sport performers experience anger, anxiety, disappointment, distress, happiness, hope, relief, reproach, and resentment in response to organisational-related events and situations. It was highlighted that due to the presence of positive and negative emotional responses, researchers and practitioners needed to expand their view of emotions and stress by looking beyond competitive anxiety (Fletcher et al., 2012a). It should also be emphasised that this research interviewed male and female performers of different sports and there remains a lack of research investigating emotions and organisational experiences in football. Therefore, it is important to continue to investigate emotions in football (additional to Study 2) in order to enhance understanding. Hence, this study will use a valid and reliable questionnaire to identify emotions to corroborate previous qualitative findings.

In academy football since the introduction of the EPPP, high demands such as an increase in coaching contact hours (see EPPP, 2011) and the frequency of regular matches in football may have a negative impact on performance and injury risk (Dvorak & Junge, 2000; Ekstrand et al., 2004). These high demands may endanger the recovery-stress balance which prevents excessive fatigue, burnout, or emotional disturbances (Difiori et al., 2014; Filaire et al., 2003). It is important to examine the recovery-stress balance e as it recognises the link between physical and psychosocial stress in sport (Kellmann 2002). Previous research examining the recovery-stress using the RESTQ-Sport (Kellmann & Kallus, 2001) in football have examined stress and recovery balance in relation to injury risk (Brink et al., 2010; Laux et al., 2015). Without focusing too much on the physical aspects of recovery, as it is not relevant to the PhD's aims, Brink et al. (2010) identified ill

elite academy football players in The Netherlands to have significantly higher general stress and significantly lower social recovery, general well-being and sleep quality when compared to healthy players. On the sport-specific scales ill players reported significantly more injury, emotional exhaustion and disturbed breaks. Laux et al. (2015) assessed German professional football players in relation to the recovery-stress variables and injury risk. The general stress scale fatigue and the sport-specific stress scales disturbed breaks and injury were significantly related to injury risk, and the general recovery scale sleep quality and the increasing risk of injury was also significant. These results support the importance of monitoring recovery-stress to minimise the outcome of injury. Furthermore Faude et al. (2011) examined stress and performance indicators throughout a competitive season in German professional and elite youth football players using the RESTQ-Sport. Faude et al. (2011) found significantly high levels of general stress, emotional stress, social stress and emotional exhaustion throughout the season and deteriorating mood state parameters such as general well-being, self-efficacy, self-regulation, conflicts/pressure were present towards the end of the season, which may indicate accumulated stress and a lack of recovery. These results recognise the psychological changes throughout a football season. However, given the recognition of recovery-stress for football player outcomes, no research to date has examined these constructs in elite youth football in England especially in the context of organisational stress.

Organisational stress components have been captured using qualitative (Study 1; Fletcher et al., 2012a) and quantitative methods (Arnold et al., 2017; Faude et al., 2011). Since this study is to investigate situational properties of stressors, emotions and recovery-stress, these aspects have finite characteristics which involve scaling of the organisational stress components to be measured. Hence, using standardised inventories to collect quantitative data is the most appropriate method as it provides an objective measure that is valid and reliable. This method allows investigation into additional components of the stress process. Furthermore, situational properties, emotions, and recovery-stress already have established questionnaires within sport which are quick and easy to use, allowing generalisation so recommendations may be made for academy programmes based on valid and reliable measures. By using a different method from Study 1

and 2 will provide an alternative look at the components of organisational stress with elite football academies.

A limitation of the aforementioned organisational stress studies is the cross-sectional design. Bartholomew et al. (2017) suggested that future research should aim to conduct studies which collect prospective longitudinal data on organisational stressors so that their temporal nature and causality can be established. A further rationale for the use of longitudinal designs can be seen in study 2 and the prospective studies of recovery-stress in academy football (e.g., Faude et al., 2011). Wagstaff et al., (2018) used a longitudinal quantitative design to predict the relationships between organisational stressors, emotional labour, burnout and turnover in athletes and coaches. However only frequency of the organisational stressors was measured and so intensity and duration are another potential area to examine within the organisational stress experience over time. Furthermore, Roberts et al. (2019) explored stressors, appraisals and emotions amongst Invictus Games athletes and veteran athletes over a 12-week period leading up to and after international sporting competitions. The same psychometrics will be used in this study to measure organisational stressors and emotions within academy football over a season.

Therefore, the aim of the study was to explore adolescent players' situational properties of organisational stressors, emotion, and recovery-stress of football academy status environments within the youth development phase across a season.

Specifically, the objectives were to:

(a) identify and compare the organisational stressors' frequencies, intensities, and duration (situational properties) encountered by players over a season.

(b) identify and compare emotions felt by players over a season.

(c) identify and compare the recovery-stress adolescent players experienced across a season.

No studies to date have looked at academy football players' organisational stressors' frequencies, intensities, and duration across a season for hypotheses to be formed. Study 2 identified time to significantly influence emotion intensity felt

players. Faude et al. (2011) found deteriorating aspects of recovery-stress by players towards the end of the season. However, due to the limited research in this area a two-tailed hypothesis was still adopted. Therefore, it was expected that:

- There will be no significant differences in the organisational stressors' frequencies, intensities, and duration across the different phases of the season (Hypothesis 1).
- There will be significant differences in players' emotions across the different phases of the season (Hypothesis 2).
- There will be significant differences in players' recovery-stress aspects across the different phases of the season (Hypothesis 3).

6.3 METHOD

6.3.1 Participants

Twenty-seven male academy football players were conveniently recruited from the youth development phase of two English football club academies. Two Category 2 football clubs initially agreed to take part however their players did not complete any questionnaires, so the sample comprised of 13 players from a category 1 and 14 players from a category 3 football club (n = 27). This was in keeping with longitudinal research in association football (e.g., Faude et al., 2011, Noon et al., 2015) where 14-15 players were recruited. Players were aged between 14 and 16 years (M age = 15. 11 years, SD = 0.63).

6.3.2 Design and procedure

Psychometric instruments were distributed to participants at three time points. Following institutional ethical approval, principal fitness coaches were contacted through existing networks already established for permission of the players to participate in the study (see Appendix 22). Permission was granted from two football clubs and informed consent was gained from the players' parents or guardians and from the prospective players themselves (see Appendix 23-25). Two pilot studies were conducted with academy football players not included in the sample and enabled the researcher to assess time requirements and

understanding of the questions (e.g., synonyms for emotions in the SEQ). Data were collected during the 2018/2019 season in three phases (similar to Study 2): early season (October and November), mid-season (January and February), and end of season (April and May). The researcher was present for and collected the questionnaire booklets at the end of each data collection phase. In each phase, players were asked to complete the individual questionnaire booklet containing three questionnaires (OSI-SP, SEQ, RESTQ-Sport); see Appendix 26), which lasted for approximately 20 minutes.

Psychometrics follow a methodology similar to post-positivism to establish probable truth using empirical data from representative samples using valid and reliable measures (Bunkers et al., 1996). This fits within the overarching pragmatist paradigm of the research programme as it allows the research to identify and compare the situational properties of organisational stressors, emotions, and recovery-stress by players across the season. Quantitative research methods are generally supported by the positivist paradigm (Ritchie et al., 2013). Hence, the use of psychometrics to determine if and to what extent predetermined study "variables" are related (e.g., time and organisational stress frequency, intensity, and duration; time and emotion intensity, time and recovery-stress).

6.3.3 Measures

Organisational stressors

The Organisational Stressor Indicator for Sport Performers (OSI-SP; Arnold et al., 2013) was used to assess the organisational stressors players had encountered in their academy during the past month. The OSI-SP has been selected as it is the first measure to be developed to comprehensively assess organisational stressors in a sport context (Arnold et al., 2013). Previous measures in the sport context have only assessed a small number of organisational-related demands (see e.g., Kristiansen et al., 2012) or failed to include organisational demands (see Martindale et al., 2010; Pain & Harwood, 2007, 2008). The OSI-SP can be used to assess a range of organisational stressors in competitive sport (Arnold et al., 2013). The OSI-SP consists of 23 items constituting five subscales: goals and development (e.g., "the development

of my sporting career"), logistics and operations (e.g., "travelling to and from training or competitions"), team and culture (e.g., "atmosphere surrounding my team"), coaching (e.g., "my coach's personality") and selection (e.g., "how my team is selected"). Responses to each item are made on three separate 6-point Likert scales: frequency ("how often did this pressure place a demand on you?"; 0 = *Never*, 5 = *Always*), intensity ("how demanding was this pressure?"; 0 = *No demand*, 5 = *Very high*), and duration ("how long did this pressure place a demand on you for?"; 0 = *No time*, 5 = *A very long time*). The three separate Likert scales represent the situational properties of each stressor. Items are scored by inserting players' responses in the corresponding cells of a table, which was provided by Dr. Arnold via email (see Appendix for OSI-SP scoring table), summing the responses in each column and then dividing the sum by the number of items in each column. Previous research has developed, validated, and supported the scale's internal consistency and content, concurrent, discriminant and factorial validity (Arnold et al., 2013).

Emotion

The Sport Emotion Questionnaire (SEQ; Jones et al., 2005) was used to measure the emotions experienced by players in academy football. The SEQ has been chosen due to its usage in an organisational environment (Arnold & Fletcher, 2015). Arnold and Fletcher (2015) stated the importance of continuing to investigate emotional responses in organisational environments due to the potential mediating factor between organisational events and undesirable outcomes (cf. Fletcher et al. 2006), for example dysfunctional psychological well-being (Noblet et al., 2003). Alternative measures of affective well-being and emotions have not been developed with reference to sport settings (see e.g., Daniels, 2000). The SEQ consists of 22 items constituting five subscales: anxiety (e.g., "Uneasy"), dejection (e.g., "Upset"), anger (e.g., "Annoyed"), excitement (e.g., "Exhilarated") and happiness (e.g., "Pleased"). Players were asked to respond how they felt right now to each item on a 5-point Likert scale ranging from 0 (*Not at all*) to 4 (*Extremely*). Jones et al. (2005) provided evidence to the reliability and face, concurrent, factorial and construct validity of the SEQ. Items are scored by totalling the items associated with each subscale and dividing by the number of items associated with that subscale. For example, Anxiety = (uneasy +

tense + nervous + apprehensive + anxious)/5. Further research also supported the reliability and validity of the SEQ during a fixed time period where all the subscales were internally consistent (α = .77 to .87; Arnold et al., 2015).

Recovery-stress

The Recovery Stress Questionnaire for athletes (RESTQ-Sport; Kellmann & Kallus, 2001) was used to assess the extent to which the player is mentally and/or physically stressed, and whether the person can use strategies for recovery. The measure was based on the notion that stressors in various areas of life accumulate leading to a maladaptive psychophysical state if there is no sufficient possibility of recovery (Laux et al., 2015). The RESTQ-Sport was included because the psychophysical aspect of the psychometric is relevant when investigating both well-being (psychological) and performance (physical) relationship outcomes in sport. It is a popular measure and was developed with regard to the requirements of high-performance sports (Kellman & Kallus, 2001). The RESTQ-Sport consists of 52 items constituting seven general stress scales: general stress, emotional stress, social stress, conflicts/pressure, fatigue, lack of energy, physical complaints (e.g., “I laughed”), five general recovery scales: success, social recovery, physical recovery, general well-being, sleep quality (e.g., “I felt physically relaxed”), three sport-specific stress scales: disturbed breaks, emotional exhaustion, injury (e.g., “I felt I wanted to quit my sport”) and four sport-specific recovery scales: being in shape, personal accomplishment, self-efficacy, self-regulation (e.g., “My muscles felt stiff or tense during performance”). Responses to each item were made on a 7-point Likert scale ranging from 0 (*Never*) to 6 (*Always*) based on how often a specific experience occurred in the last three days/nights. The subscale scores are then added together in order to produce four scales: general stress, general recovery, sport-specific stress and sport-specific recovery. High scores on the stress scales indicate a high level of stressful experiences, whereas high scores on the recovery scales indicate a high level of activation that improves the regaining of resources and recovery from stress. Global stress and global recovery measures are obtained by the addition of the general and sport-specific stress scales and the general and sport-specific recovery scales, respectively. Global stress can be subtracted from global recovery to give the total recovery stress score. Previous research shows the

RESTQ-Sport to demonstrate high test-retest reliability (see Kallus, 1995), good reliability as well as construct validity (Kellmann, 2010; Kellmann & Kallus, 2001).

6.3.4 Data analysis

In line with Noon et al. (2015), one-way repeated measures ANOVA was used to compare players' situational properties of stressors, emotions, and recovery-stress at the beginning, mid- and end of season. The ANOVA was used to compare the same participants who provided data at more than two time points, which also falls within the post-positivist paradigm since inferential statistics are a rigorous quantitative analysis technique in an objective, formal and rigid fashion (Gupta & Gupta, 2011 as cited by Mkandawire, 2019). Once again supporting the overarching paradigm of the research programme (pragmatism) due to the best data analysis method to fit the research question. One-way repeated ANOVAs were used to look at the specific differences of stressor situational properties (dependent variable) between different phases of the season (independent variable with levels: beginning, mid and end). Participants did participate in all phases of the season. This analysis was also carried out for emotion and recovery-stress. This study aims to identify the differences between several dependent variables over time not for a difference along a combination of dependent variables over time (multivariate analysis of variance). Potential sources of bias in the form of violations of assumptions were checked. Parametric tests were used on questionnaire data due to three reasonings: a) the Likert scale items may be ordinal but the scales consisting of sums will be interval (Carifio & Perla, 2008); b) even if conceptually the Likert scale is ordinal, the extent theoretically the distance between the scale numbers are the same is irrelevant to the analysis as the computer has no way of verifying this (Gaito, 1980); and c) ANOVA is robust to non-normality and skewness (Norman, 2010). The assumptions checked were independence, normality and sphericity. All observations were independent. The Shapiro-Wilks test was used to check for normal distribution as it has more power to detect differences from normality than the K-S test (Field, 2013). If the data were not normally distributed, a Freidman's test would be performed which does not assume normality. Mauchly's test was used to check for sphericity. This tests the null hypothesis that the variances of the differences between conditions are equal. If the Mauchly's test is significant, there

are significant differences between the variances of differences and therefore the condition of sphericity is not met. However, if the test is non-significant then it is reasonable to conclude the variances of differences are approximately equal. If sphericity is violated, the Bonferroni method seems to be the most robust of univariate techniques in terms of power and control of the Type I error (Field, 2013). Furthermore, adjusting the degrees of freedom for any F-ratios affected by the violation will control the Type I error rate (Field, 2013). This is advocated by using Greenhouse and Geisser (1959) and Huynh and Feldt (1976) estimates. It is recommended that when estimates of sphericity are greater than 0.75, the Huynh-Feldt estimate should be used, but when the Greenhouse-Geisser estimate is less than 0.75 or nothing is known about the sphericity, the Greenhouse-Geisser correction should be used. If sphericity is not violated, Tukey's test can be used (Field, 2013).

6.4 RESULTS

Eleven out of the 27 players withdrew from the study; thus, the total data set were 16 players who completed all three phases of the season. This is still in keeping with previous longitudinal research in association football (e.g., Faude et al., 2011, Noon et al., 2015) where 14-15 players were recruited.

Stressors. Stressor situational properties between different times of the season were statistically analysed to look for differences. Data for all goals and development situational properties, team and culture frequency and duration, and coaching intensity met the requirements for parametric inferential analysis and so were analysed using one-way repeated measures ANOVAs. The remaining situational property data did not meet parametric assumptions and so Friedman's tests were performed.

Table 6.1 Means and standard deviations of different stressor properties over the season

Stressor	Property	Phase 1 (Beginning)		Phase 2 (Mid)		Phase 3 (End)	
		Mean Control	Standard Deviation	Mean Control	Standard Deviation	Mean Control	Standard Deviation
G&D	Frequency	1.70	0.82	2.15	0.72	1.71	0.76
	Intensity	1.71	0.81	2.11	0.83	1.90	0.76
	Duration	1.64	0.92	2.31	0.84	1.81	0.77
L&O	Frequency	0.92	0.50	1.00	0.68	0.92	0.96
	Intensity	1.02	0.53	1.12	0.70	0.94	0.96
	Duration	0.89	0.50	1.15	0.68	1.09	1.12
T&C	Frequency	1.53	0.69	1.91	0.73	1.41	0.82
	Intensity	1.61	0.69	2.06	0.73	1.44	0.91
	Duration	1.34	0.74	1.94	0.85	1.34	0.86
Coaching	Frequency	1.16	0.81	1.66	1.29	1.47	1.40
	Intensity	1.44	0.87	1.59	1.05	1.59	1.37
	Duration	1.31	0.95	2.16	1.84	1.34	1.36
Selection	Frequency	1.47	1.15	1.81	1.28	0.91	0.76
	Intensity	1.50	1.06	1.97	1.34	0.94	0.79
	Duration	1.44	1.12	1.78	1.26	1.00	0.88

Where G&D = Goals and Development
L&O = Logistics and Operations
T&C = Team and Culture

The frequency of the goals and development stressor fell between ‘rarely’ and ‘often’. There was a significant effect of time of the season on goals and development stressor frequency, $F(2) = 5.82$, $p = 0.007$ (see Table 6.1.1). However, after post hoc test there were no significant differences between goals and development frequency at all times of the season ($p > 0.05$). The intensity of the goals and development stressor fell between ‘very low’ and ‘moderate’. There was no significant effect of time of the season on goals and development stressor intensity, $F(2) = 1.58$, $p = 0.223$ (see Table 6.1.1). The duration of the goals and development stressor fell between ‘a very short time’ and ‘a medium amount of time’. There was a significant effect of time of the season on goals and development stressor duration, $F(2) = 3.39$, $p = 0.047$ (see Table 6.1.1). However, after post hoc tests there were no significant differences between goals and development duration at all times of the season ($p > 0.05$).

The frequency of logistics and operations stressor fell between ‘never’ and ‘rarely’. There was a no significant effect of the time of the season on logistics and operations stressor frequency, X^2 (2) = 3.6, p = 0.165 (see Table 6.1.2). The intensity of logistics and operations stressor fell between ‘no demand’ and ‘low’. There was a no significant effect of the time of the season on logistics and operations stressor intensity, X^2 (2) = 2.07, p 0.356 (see Table 6.1.2). The duration of the logistics and operations stressor fell between ‘no time’ and ‘a short time’. There was a no significant effect of the time of the season on logistics and operations stressor duration, X^2 (2) = 4.10, p = 0.129 (see Table 6.1.2).

The frequency of team and culture stressors fell between ‘rarely’ and ‘sometimes’. There was a no significant effect of time of the season on team and culture stressor frequency, F(2) = 2.61, p = 0.09 (see Table 6.1.1). The intensity of team and culture stressors fell between ‘very low’ and ‘moderate’. There was a significant effect of time of the season on team and culture stressor intensity, X^2 (2) = 8.63, p = 0.013 (see Table 6.1.2). Pairwise comparison and Dunn-Bonferroni post hoc tests revealed a significant difference between team and culture intensity at mid-season and the end of the season (p = 0.018). Team and culture stressor intensity decreased from mid-season (*M* = 2.06, *SD* = 0.73) to the end of the season (*M* = 1.44, *SD* = 0.91; see Table 6.1). The effect size for this analysis (*g* = 0.73) was found to fall in the threshold for a moderate effect. The duration of team and culture stressors fell between ‘a very short time’ and ‘a short time’. There was a significant effect of time of the season on team and culture stressor duration, F(2) = 4.53, p = 0.019 (see Table 6.1.1). There was a significant difference between team and culture stressor duration at the beginning of the season and at mid-season (p = 0.024). Team and culture stressor duration increased from the beginning of the season (*M* = 1.34, *SD* = 0.74) to mid-season (*M* = 1.94, *SD* = 0.85; see Table 6.1). The effect size for this analysis (*g* = 0.73) was found to fall in the threshold for a moderate effect.

The frequency of coaching stressors fell between ‘rarely’ and ‘sometimes’. There was no significant effect of time of the season on coaching stressor frequency, X^2 (2) = 1.69, p = 0.43 (see Table 6.1.2). The intensity of coaching stressors fell between ‘very low’ and ‘low’. There was no significant effect of time of the season on coaching stressor intensity, F(2) = 0.118, p = 0.89 (see Table

6.1.1). The duration of coaching stressors fell between ‘a very short time’ and ‘a medium amount of time’. There was no significant effect of time of the season on coaching stressor duration, X^2 (2) = 3.35, p = 0.188 (see Table 6.1.2).

The frequency of selection stressors fell between ‘never’ and ‘sometimes’. There was a significant effect of time of the season on selection stressor frequency, X^2 (2) = 7.37, p = 0.025 (see Table 6.1.2). Pairwise comparison and Dunn-Bonferroni post hoc tests revealed a significant difference between selection stressor frequency at mid-season and the end of the season (p = 0.04). Selection stressor frequency decreased from mid-season (*M* = 1.81, *SD* = 1.28) to the end of the season (*M* = 0.91, *SD* = 0.76; see Table 6.1). The effect size for this analysis (*g* = 0.83) was found to fall in the threshold for a moderate effect. The intensity of selection stressors fell between ‘no demand’ and ‘low’. There was a significant effect of time of the season on selection stressor intensity, X^2(2) = 6.87, p = 0.032 (see Table 6.1.2). However, pairwise comparison and Dunn-Bonferroni post hoc tests revealed no significant differences between selection stressor intensity between all times of the season (p = 0.051). The duration of selection stressors fell between ‘a very short time’ and ‘a short time’. There was no significant effect of the time of the season on selection stressor duration, X^2 (2) = 4.27, p = 0.118 (see Table 6.1.2).

Table 6.1.1 One-way repeated measures analysis of variance of stressor properties over the season by academy players (data met parametric assumptions)

Stressor	Property	df	SS	MS	F	p
G&D	Frequency	2	4.91	2.45	5.82	0.007
	Intensity	2	1.32	0.66	1.58	0.223
	Duration	2	3.93	1.97	3.39	0.047
T&C	Frequency	2	2.17	1.08	2.61	0.09
	Duration	2	3.76	1.88	4.53	0.019
Coaching	Intensity	2	0.26	0.13	0.12	0.89

Where G&D = Goals and Development
T&C = Team and Culture

Table 6.1.2 Friedman tests of stressor properties over the season by academy category status players (for non-normally distributed data)

Emotion		df	X^2	p
L&O	Frequency	2	3.60	0.165
	Intensity	2	2.07	0.356
	Duration	2	4.10	0.129
T&C	Intensity	2	8.63	0.013
Coaching	Frequency	2	1.69	0.430
	Duration	2	3.35	0.188
Selection	Frequency	2	7.37	0.025
	Intensity	2	6.87	0.032
	Duration	2	4.27	0.118

Where L&O = Logistics and Operations
T&C = Team and Culture

Emotion. Emotion felt between different times of the season were statistically analysed to look for differences. Data for excitement and happiness met the requirements for parametric inferential analysis and so were analysed using one-way repeated measures ANOVAs. Data for anxiety, dejection and anger did not meet parametric assumptions and so Friedman's tests were performed.

Table 6.2 Means and standard deviations of different emotions over the season

Emotion	Phase 1 (Beginning)		Phase 2 (Mid)		Phase 3 (End)	
	Mean Control	Standard Deviation	Mean Control	Standard Deviation	Mean Control	Standard Deviation
Anxiety	0.43	0.47	0.50	0.63	0.33	0.37
Dejection	0.16	0.22	0.66	0.71	0.09	0.21
Anger	0.20	0.28	0.81	0.96	0.25	0.34
Happiness	2.23	0.97	1.86	0.82	1.66	0.69
Excitement	1.94	1.04	1.59	0.72	1.16	0.79

The level of anxiety felt was perceived to be between 'not at all' and 'a little'. There was no significant effect of time of the season on perceived anxiety, X^2 (2) = 0.778, p = 0.678 (see Table 6.2.1). The level of perceived dejection was perceived to be between 'a little' and 'not at all'. There was a significant effect of time of the season on perceived dejection, X^2 (2) = 11.286, p = 0.004 (see Table 6.2.1).

Pairwise comparison and Dunn-Bonferroni post hoc tests revealed a significant difference between mid-season dejection and end of the season dejection (p = 0.024). Players perceived dejection decreased from mid-season (*M* = 0.66, *SD* = 0.71) to the end of the season (*M* = 0.09, *SD* = 0.21; see Table 6.2). The effect size for this analysis (*g* = 1.06) were found to fall in the threshold for a moderate effect. The level of anger was perceived to be between 'a little' and 'not at all'. There was no significant effect of time of the season on perceived anger, X^2 (2) = 5.07, p = 0.079 (see Table 6.2.1). The level of happiness was perceived to be between 'quite a bit' and 'a little'. There was a significant effect of time of the season on perceived happiness, F (2) = 4.812, p = 0.015 (see Table 6.2.2). There was a significant decrease in happiness between the beginning (*M* = 2.23, *SD* = 0.97; see Table 6.2) and the end of the season (*M* = 1.66, *SD* = 0.69; p =0.032). The effect size for this analysis (*g* = 0.66) was found to fall in the threshold for a moderate effect. The level of excitement was perceived to be between 'moderately' and 'a little'. There was a significant effect of time of the season on perceived excitement, F (2) = 5.84, p = 0.007 (see Table 6.2.2). There was a significant decrease in excitement between beginning (*M* = 1.94, *SD* = 1.04; see Table 6.2) and the end of the season (*M* = 1.16, *SD* = 0.79; p = 0.009). The effect size for this analysis (*g* = 1.01) was found to fall in the threshold for a moderate effect.

Table 6.2.1 Friedman tests of emotions over the season by academy category status players (for non-normally distributed data)

Emotion	df	X^2	p
Anxiety	2	0.68	0.778
Dejection	2	11.29	0.004
Anger	2	5.07	0.079

Table 6.2.2 One-way repeated measures analysis of variance of emotion over the season by academy players (data met parametric assumptions)

Emotion	df	SS	MS	F	p
Excitement	2	4.91	2.45	5.82	0.007
Happiness	2	2.753	1.38	4.81	0.015

Recovery stress. Recovery-stress data between different times of the season were statistically analysed to look for differences. Data for general stress, emotional stress, fatigue, lack of energy, somatic complaints, somatic relaxation, disturbed breaks, sports-specific stress scores and self-regulation did not meet the requirements for parametric inferential analysis and so Friedman's tests were performed. The remaining recovery-stress data did meet parametric assumptions and so were analysed using one-way repeated measures ANOVAs.

Table 6.3 Means and standard deviations of recovery stress over the season

Recovery/Stress	Phase 1 (Beginning)		Phase 2 (Mid)		Phase 3 (End)	
	Mean Control	Standard Deviation	Mean Control	Standard Deviation	Mean Control	Standard Deviation
General stress	1.88	2.58	1.69	1.26	1.00	1.21
Emotion stress	2.94	1.61	2.94	1.18	2.13	1.36
Social stress	2.19	1.64	2.44	1.36	1.88	1.59
Conflicts/pressure	2.69	2.02	3.19	1.38	3.44	1.67
Fatigue	4.00	2.13	4.56	2.34	3.38	1.54
Lack of energy	3.88	1.75	3.38	1.96	2.63	1.89
Somatic complaints	2.56	1.75	1.81	1.76	2.31	1.66
GENERAL STRESS SCORE	20.13	8.32	20.00	7.86	16.75	8.00
Success	5.75	2.35	5.31	1.96	5.88	2.06
Social relaxation	8.69	2.39	8.13	2.45	8.56	2.22
Somatic relaxation	4.81	1.72	4.63	2.16	4.88	2.06
General well-being	7.25	2.24	7.25	2.27	7.06	1.57
Sleep quality	7.88	2.53	8.69	1.96	8.31	2.09
GENERAL RECOVERY SCORE	34.38	6.85	34.00	7.59	34.69	7.35
Disturbed breaks	5.13	4.91	3.69	3.16	5.31	3.20
Burnout/emotion	5.44	4.02	5.56	2.66	6.00	3.69
Fitness/injury	9.06	3.36	8.69	3.96	9.06	4.06
SPORT-SPECIFIC STRESS SCORE	19.63	9.25	19.94	7.21	20.38	8.88
Fitness/shape	15.69	3.75	14.94	3.60	12.19	4.71
Burnout/personal	11.69	4.67	11.69	4.38	8.69	2.73
Self-efficacy	14.69	4.16	14.31	3.98	12.31	4.57
Self-regulation	16.50	4.65	16.00	4.34	13.19	4.92
SPORT-SPECIFIC RECOVERY SCORE	58.56	15.29	56.94	13.96	46.38	14.75
GLOBAL STRESS	39.75	16.03	37.94	13.61	37.13	13.91
GLOBAL RECOVERY	92.94	18.80	90.94	19.54	81.06	18.38
TOTAL RECOVERY STRESS SCORE	53.19	28.24	53.00	24.89	43.94	25.87

General stress occurrence scores indicate a low level of stressful experiences. There was no significant effect of time of the season on the occurrence of general stress, X^2 (2) = 1.48, p = 0.477 (see Table 6.31.). Emotional stress occurrence scores indicate a low level of stressful experiences. There was a significant effect of time of the season on the occurrence of emotional stress, X^2 (2) = 6.30, p = 0.043 (see Table 6.3.1). However, after pairwise comparisons and Bonferroni post hoc tests, there were no significant differences between emotional stress at different times of the season (p > 0.05). Social stress scores indicate a low level of stressful experiences. There was no significant effect of time of the season on the occurrence of social stress, F (2) = 0.64, p = 0.534 (see Table 6.3.2). Conflicts/pressure occurrence scores indicate a low level of stressful experiences. There was no significant effect of time of the season on the occurrence of conflicts/pressure, F (2) = 1.15, p = 0.329 (see Table 6.3.2). Fatigue occurrence scores indicate a low level of stressful experiences. There was no significant effect of time of the season on the occurrence of fatigue, X^2 (2) = 1.05, p = 0.591 (see Table 6.3.1). Lack of energy occurrence scores indicate a low level of stressful experiences. There was a significant effect of time of the season on the occurrence of lack of energy, X^2 (2) = 6.04, p = 0.049 (see Table 6.3.1). However, after pairwise comparisons and Bonferroni post hoc tests, there were no significant differences between lack of energy at different times of the season (p > 0.05). Somatic complaints occurrence scores indicate a low level of stressful experiences. There was no significant effect of time of the season on the occurrence of somatic complaints, X^2 (2) = 3.57, p = 0168 (see Table 6.3.1). Overall, general stress scores indicate a low level of stressful experiences. There was no significant effect of time of the season on the general stress score, F (2) = 1.33, p = 0.279 (see Table 6.3.2).

Success occurrence scores indicate a medium level of recovery. There was no significant effect of time of the season on the occurrence of success, F(2) = 0.51, p = 0.605 (see Table 6.3.2). Social relaxation occurrence scores indicate a high level of recovery. There was no significant effect of time of the season on the occurrence of social relaxation, F(2) = 0.46, p = 0.636 (see Table 6.3.2). Somatic relaxation occurrence scores indicate a low level of recovery. There was no significant effect of time of the season on the occurrence of somatic relaxation, X^2 (2) = 0.15, p = 0.926 (see Table 6.3.1). General well-being occurrence scores

indicate a medium level of recovery. There was no significant effect of time of the season on the occurrence of general well-being, F(2) = 0.07, p = 0.931 (see Table 6.3.2). Sleep quality occurrence scores indicate a high level of recovery. There was no significant effect of time of the season on the occurrence of sleep quality, F(2) = 0.5, p =0.611 (see Table 6.3.2). Overall, general recovery scores indicate a medium level of recovery. There was no significant effect of time of the season on players' general recovery score, F(2) =0.07, p = 0.934 (see Table 6.3.2).

Disturbed breaks occurrence scores indicate a low level of stress. There was no significant effect of time of the season on the occurrence of disturbed breaks, X^2 (2) = 2.39, p = 0.302 (see Table 6.3.1). Burnout/emotional exhaustion occurrence scores indicate a low level of stress. There was no significant effect of time of the season on the occurrence of burnout/emotional exhaustion, F(2) = 0.20, p = 0.819 (see Table 6.3.2). Fitness/injury occurrence scores indicate a low level of stress. There was no significant effect of time of the season on the occurrence of fitness/injury, F(2) = 0.16, p = 0.784 (see Table 6.3.2). Overall, sport-specific stress scores indicate a low level of stress. There was no significant effect of time of the season on players' sport-specific stress scores, X^2 = 0.44, p 0.808 (see Table 6.3.1).

Fitness/being in shape occurrence scores indicate a medium level of recovery. There was a significant effect of time on the occurrence of fitness/being in shape, F(2) = 5.14, p = 0.012 (see Table 6.3.2). There was a significant decrease in fitness/being shape from mid-season (*M* = 14.94, *SD* = 3.60; see Table 6.3) to the end of the season (*M* = 12.19, *SD* = 4.71; p = 0.026). The effect size for this analysis (*g* = 0.64) was found to fall in the threshold for a moderate effect. Burnout/personal accomplishment occurrence scores indicate a medium level of recovery. There was a significant effect of time of the season on the occurrence of burnout/personal accomplishment, F(2) = 6.92, p = 0.003 (see Table 6.3.2). There was a significant decrease in burnout/personal accomplishment from the beginning (*M* = 11.69, *SD* = 4.67; see Table 6.3) to the end of the season (*M* = 8.69, *SD* = 2.73; p = 0.007), and from mid-season (*M* = 11.69, *SD* = 4.38) to the end of the season (*M* = 8.69, *SD* = 2.73; p = 0.018). The effect sizes for these analyses (*g* = 0.76 for the beginning and end of season, *g* = 0.80 for mid-season and the end of season) were found to fall in the threshold for a moderate effect.

Self-efficacy occurrence scores indicate a medium level of recovery. There was no significant effect of time of the season on the occurrence of self-efficacy, F(2) = 2.67, p = 0.086 (see Table 6.3.2). Self-regulation occurrence scores indicate a medium level of recovery. There was no significant effect of time of the season on the occurrence of self-regulation, X^2 = 4.74, p = 0.093 (see Table 6.3.1). Overall, sport-specific recovery scores indicate a medium level of recovery. There was a significant effect of time of the season on players' sport-specific recovery scores, F(2) = 6.08, p = 0.006 (see Table 6.3.2). There was a significant decrease in sport-specific recovery scores from the beginning (*M* = 58.56, *SD* = 15.29; see Table 6.3) to the end of the season (*M* = 46.38, *SD* = 14.75, p = 0.047), and from mid-season (*M* = 56.94, *SD* = 13.96) to the end of the season (*M* = 46.38, *SD* = 14.75, p = 0.025). The effect size for these analyses (*g* = 0.79 for the beginning and end of season, *g* = 0.72 for mid-season and the end of season) were found to fall in the threshold for a moderate effect.

Global stress scores indicate a low level of stress. There was no significant effect of time of the season on global stress scores, F(2) = 0.28, p = 0.757 (see Table 6.3.2). Global recovery scores indicate a medium level of recovery. There was a significant effect of time of the season on global recovery scores, F(2) = 5.93, p = 0.007 (see Table 6.3.2). There was a significant decrease in global recovery scores from the beginning of the season (*M* = 92.94, *SD* = 18.80; see Table 6.3) to the end of the season (*M* = 81.06, *SD* = 18.38, p = 0.029). The effect size for this analysis (*g* = 0.62) was found to fall in the threshold for a moderate effect. Total recovery stress scores indicate a low to medium recovery stress score (higher scores indicate more recovery, less stress). There was no significant effect of time of the season on total recovery stress scores, F(2) = 1.86, p = 0.17 (see Table 6.3.2).

Table 6.3.1 Friedman tests of recovery stress over the season by academy category status players (for non-normally distributed data)

Recovery stress	df	X^2	p
General stress	2	1.48	0.477
Emotional stress	2	6.30	0.043
Fatigue	2	1.05	0.591
Lack of energy	2	6.04	0.049
Somatic complaints	2	3.57	0.168
Somatic relaxation	2	0.15	0.926
Disturbed breaks	2	2.39	0.302
SPORT-SPECIFIC STRESS score	2	0.44	0.808
Self-regulation	2	4.74	0.093

Table 6.3.2 One-way repeated measures analysis of variance of recovery stress over the season by academy players (data met parametric assumptions)

Emotion	df	SS	MS	F	p
Social stress	2	2.54	1.27	0.64	0.534
Conflicts/pressure	2	4.67	2.33	1.15	0.329
GENERAL STRESS score	2	117.17	58.58	1.33	0.279
Success	2	2.79	1.40	0.51	0.605
Social relaxation	2	2.79	1.40	0.46	0.636
General well-being	2	0.38	0.19	0.07	0.931
Sleep quality	2	5.29	2.65	0.07	0.931
GENERAL RECOVERY score	2	3.79	1.90	0.07	0.034
Burnout/emotional exhaustion	2	2.79	1.40	0.20	0.819
Fitness/injury	2	1.50	1.03	0.16	0.784
Fitness/being in shape	2	108.67	54.33	5.14	0.012
Burnout/personal accomplish	2	96.00	48.00	6.92	0.003
Self-efficacy	2	52.17	26.08	2.67	0.086
SPORT-SPECIFIC RECOVERY	2	1401.29	700.65	6.08	0.006
GLOBAL STRESS	2	57.79	28.90	0.28	0.757
GLOBAL RECOVERY	2	1293.50	646.75	5.93	0.007
TOTAL RECOVERY STRESS	2	894.54	447.27	1.86	0.174

6.5 DISCUSSION

The aim of the study was to explore adolescent players' situational properties of organisational stressors, emotions, and recovery-stress of football academy environments within the youth development phase across a season. The first objective was to identify and compare the organisational stressors frequencies, intensities, and duration (situational properties) encountered by players over a season. Stressor frequencies predominantly occurred rarely, stressor intensities predominantly ranged between very low and low and stressor duration predominantly ranged from a very short time to a short time. Thus, suggesting that organisational stressors are rare, hardly intense and occur for a short time. This is similar to Roberts et al.'s (2019) research where military veteran's Invictus games athletes also experienced similar scores (1 and 2) in organisational stressors frequency, intensity, and duration. However, findings do not support the higher frequencies, intensities, and duration of organisational stressors, particularly logistics and operations associated with gender, sport type and performance level as seen by Arnold et al. (2016).

The lack of presence, intensity, and duration of organisational stressors within the OSI-SP (goals and development, logistics and operations, team and culture, coaching) could be due to the possibility that these stressors may not be frequent within youth elite football academies. Study 2 provided reoccurring (not rare) frequencies of daily living, external interests, academy football and school education. This suggests the importance of being a player in an academy influencing life outside of football. Furthermore, the presence of academy football stressors does suggest some corroboration with OSI-SP stressors. However, the subscales of the OSI-SP may not be relevant to the stressors of academy youth football. This could suggest that age could be a demographic difference in organisational stressors experienced by sports performers. Future research would have to examine the validity and reliability in elite youth football.

Time only influenced stressors' situational properties by decreasing team and culture stressor intensity between mid and end of the season, increasing team and culture stressor duration between beginning and mid-season, and decreasing selection stressor frequency between mid and end of the season. This provides partial support to hypothesis 1 (i.e., there will be a significant difference in the organisational stressors' frequencies, intensities, and duration across a season). The findings can provide some support to aspects of previous research. For example, Roberts et al. (2019) found team and culture stressor frequency and intensity from competition to post-competition (end of the time point) to significantly decrease. This is similar to this study's findings as team and culture stressor frequency and intensity decreased towards the end of the season. However, it provides further understanding to the stressor situational properties change in football.

This study showed that team and culture stressor intensity decreased between mid and end of the season. These team and culture stressors are associated with attitudes and behaviour in the team and may have decreased because at the end of a season there are less matches, some players have been released from the club and therefore are not around certain attitudes in the team, and because team culture has improved over the season. Explanations could be certified by future research exploring the relationship between team cultural aspects such as team identity, team efficacy and team cohesion, and team and

culture stressors over time. Findings also found team and culture stressor duration increased between the beginning and mid-season. This may be explained by the increased amount of time players spent together training and playing matches in the early part of a season. In addition, the decrease in selection frequency between mid and end of season may be due to player release from the academy. At mid-season (usually between December and February) players are told if they are staying on for next season. Players selected will continue with the rest of the season, players not selected tend to go out on trails at other clubs. Hence, at the end of a season players will be confident in being selected for the remainder of the season and there are less selection issues as the players remaining will be selected for games (i.e., to continue to develop for next season at the academy).

The second objective was to identify and compare emotions felt by players over a season. Emotions were predominantly felt ‘a little’ by players where happiness and excitement were felt closer to ‘moderately’ or ‘quite a bit’ compared to anxiety, dejection and anger which were felt closer to ‘not at all’ over the season. These findings suggest that emotions were not intense at all three phases of the season. Results do not support the findings in Study 2 where emotion intensity was fairly strong during the season. However, this emotion intensity included every emotion felt throughout the season. Despite an overall emotion intensity for Study 2, players’ emotion intensities for specific emotions tended to be a lot higher than in this current study. Overall, the difference in both studies’ findings endorse the need to investigate specific emotion intensity in sport further.

Previous literature has identified sport performers to display a range of emotions and emotion intensity to range from moderate to strong (Study 2; Nicholls et al., 2009). There could be several explanations for lack of intensity in emotions in this study. For example, the time of SEQ completion was during spare time at academy training when emotions may be subdued; emotions may not have been recorded at a time of stressors occurring; emotion intensity may be higher for a specific type of stressor (such as external interests and daily living experiences as mentioned in Study 2); or there is a methodological difference in the SEQ and an emotional intensity Likert scale within a diary. In addition to the findings, happiness and excited were slightly more intense than the remaining emotions. This supports Nicholls et al. (2010) research where the intensity of positive

emotions was higher than the other emotions and Study 2 where happiness-joy was the most prominent emotion throughout the season. Future research needs to explore this in more detail by examining the factors that underpin players experiencing positive emotions in sports settings.

Time influenced emotions by decreasing all aspects of the following: dejection between mid and end of the season, happiness between beginning and end of the season, and excitement between beginning and end of the season. This provides partial support to hypothesis 2 (i.e., there will be a significant difference in players' emotions between different phases of the season). Findings suggest that emotion intensity deteriorates at the end of the season for dejection, happiness and excitement. This supports Study 2 findings as emotion intensity was significantly lower at the end of the season compared to mid-season. Possible explanations for the deterioration of positive emotions and dejection could be a change in appraisals of stressors, better emotion regulation or emotional exhaustion over a season. For example, consistent with the relational conceptualisation (Lazarus, 1999) these differences may reflect the different situational experiences at the end of the season that could have accounted from the decrease in emotion intensities. Emotion regulation is the process by which "…individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross, 1998, p.275). Individuals can regulate the precursor of emotion such as the situation or appraisal and can also modify the observable signs of emotions (Grandey, 2000). It may be that at the end of the season, players are better at emotional regulation. Emotional exhaustion is a chronic state of emotional and physical reduction resulting from continuous job demands (Shirom, 1989). It is also one of three interrelated parts (along with diminished personal/performance accomplishments and depersonalisation) that forms burnout (Maslach, 1982). Within the model, emotional exhaustion is a sense of feeling emotionally drained and physically fatigued (Wright & Cropanzano, 1998). Hence, from the study's findings of low intensity and significant reduction in emotions at the end of the season could be the result of continuous demands and draining of emotions over a season. However, future research would have to examine the relationships between appraisal, emotional regulation and emotional exhaustion (alongside burnout) with emotion intensity over a season to establish possible explanations.

The third objective was to identify and compare the recovery-stress players experienced across a season. General stress and sport-specific stress scores (including the summation of these to equal global stress) indicated that players encountered low level stressful experiences. General recovery and sport-specific recovery scores (including the summation of these to equal global recovery) indicated that players have a medium level of activation that moderately improves the regaining of resources and recovery from stress. Overall, total recovery stress scores were low to medium (higher scores indicate more recovery, less stress), which indicates that there needs to be an increase in recovery since stress levels are already low. This will allow for players to use better and more frequent strategies for recovery, which is important in order to restore the body to the pre-exercise state in preparation for the next bout of exercise. This is similar to Faude et al.'s (2011) research where global stress scores were low and global recovery scores were low to medium. However, sport specific stress scores and certain aspects of general stress i.e., conflicts/pressure, fatigue and lack of energy scores were higher than Faude et al.'s (2011) results. Furthermore, certain aspects of general recovery and sport-specific recovery i.e., social relaxation, general well-being, sleep quality, fitness/shape, self-efficacy and self-regulation were higher than Faude et al.'s (2011) results, which could potentially explain the difference in stress and recovery levels between research studies.

Players encountered low levels of global stress and medium levels of global recovery. It must be noted that stress items were developed through continuous bio-psychological research in the area of stress (Kellmann & Kallus, 2001). However, in Study 2 the frequency of the personal and organisational stressors were quite high. These differences may suggest that athletes can encounter bio-psychological, personal and organisational aspects within sport. This supports the rationale that stressors differ in origin and nature (cf. Fletcher & Hanton, 2003; Jones, 2002, Woodman & Hardy, 2001). For example, bio-psychological states are less frequent than personal and organisational stressors. This could potentially contribute to players having different stress levels in stress-recovery compared to organisational stress levels. Therefore, practitioners must be wary that having a low stress level in stress-recovery does not necessarily mean players have no stress at all. Furthermore, caution must be expressed since items of the RESTQ-Sport are defined as a stress state rather than a stressor. This can be seen within

the psychometric as some items can be a product of the stress process (e.g., ‘bad mood’ could be defined as an emotion and ‘overtired’ could be defined as a behavioural response).

Time influenced recovery-stress by significantly decreasing all aspects of the following: fitness/being in shape between mid and end of the season; burnout/personal accomplishment between beginning and end of the season, and between mid and end of the season; sport-specific recovery scores between beginning and end of the season, and between mid and end of the season; and global recovery scores between beginning and end of the season. This provides partial support to hypothesis 3 (i.e., there will be a significant difference in players’ recovery-stress across the season). The findings suggest that the fitness/being in shape and burnout/personal accomplishment aspects of the sport-specific recovery sub-scale are important influences on the significant changes in sport-specific recovery and global recovery over time. This does not support previous research where Faude et al. (2011) found no significant changes in fitness/being in shape throughout a season and different aspects of sport-specific recovery (self-regulation, self-efficacy), general recovery (social recovery), sport-specific stress (injury, disturbed breaks) and general stress (physical complaints) to decrease significantly throughout the same phases of this study. Similarly, global recovery did significantly decrease at the end of the season which highlights the influence of time of the season in recovery. However, Faude et al. (2011) found significant decreases in general and sport-specific aspects of recovery, whereas this study only found sport-specific aspects.

The significant decrease at the end of the season for fitness/being in shape and burnout/personal accomplishment subsequently influencing sport-specific recovery and global recovery highlights the importance of the end of the season in players’ recovery. Players’ decrease in fitness and personal accomplishment (increase in burnout perceptions) at the end of the season could be due to the training load (Gabbett et al., 2016), the body’s need for restitution (Currie et al., 1999), and persistent devotion to challenging goals, unmet needs and unfulfilled expectations (Freudenberger & Richelson, 1980; Gold & Roth, 1993). These areas are a valuable focus within sport since overuse in sport can lead to burnout which may have a detrimental effect on children leaving the sport (see Dale & Weinberg,

1989) and participating in sport as a long-term healthy activity (Brenner, 2007). In agreement with Moen et al. (2016) future research could investigate the relationship between objective physiological data (e.g., training load, recovery time, fitness data) and subjective psychological data (e.g., perceived performance, affect, worry) over a season to further develop the line of research and see if a more complex model might explain burnout.

Despite the strength of further understanding isolated components of the stress process over time within a specific sports population, a limitation of this study was respondent fatigue (similar to Study 2). Respondent fatigue could deteriorate the quality of the data collected by players' motivation dropping towards later sections of the questionnaire booklet or at the end of the season. However, it would be expected that more dependent variables within the questionnaires would deteriorate at the end of the season. Furthermore, the researcher was present during every data collection to ensure participants were completing the questionnaires fully in sufficient time. Hence, respondent fatigue was seen to not temper any significant time effects within Study 3. Another limitation of this study was not investigating the relationship between the components. It was deemed appropriate in the thesis to first study some of the components of the stress process within football academies and then allowing future research to build upon this (see Section 2.1.2.3). This future research could explain changes over time related to stress outcomes, which will provide a more theoretically informed insight into the complex nature of stress (cf. Lazarus, 2000). However, caution must be taken with the measurements used. With the little presence of emotions using the SEQ and low frequencies, intensities and duration present with the OSI-SP, there could be some methodological issues with the use of these measurements with youth elite football academy players. McCarthy et al. (2013) suggested the SEQ has not been validated in youth sport but shows evidence of concurrent validity with the Brunel Mood Scale (Terry et al., 1999; a measure of emotion in youth sport). The Brunel Mood Scale was not used in this study to be in keeping with Lazarus' (1999) stress model and identified emotions. Furthermore, there has been no validation of the OSI-SP in youth elite sport either. Future research should validate the use of these measures in elite youth sport.

To conclude, the aim of the study was to explore adolescent players' situational properties of organisational stressors, emotions, and recovery-stress within the youth development phase of football academies over a season. Findings revealed organisational stressors were rare, hardly intense and occurred for a short time; emotions were felt a little; and recovery-stress was low to medium. This indicates that there needs to be an increase in recovery (since stress levels were already low) to allow players to restore their body to the pre-exercise state in preparation for the next bout of football training or match play. Results also highlighted the prominence of the end of the season in reference to a significant decrease in team and culture stressor frequency and intensity, decrease in dejection, happiness and excitedness, and decrease in recovery. The findings provide important understandings for research in football regarding fluctuations in components of the stress process over time (e.g., stressors, emotions, and behaviour). There must be some recognition of methodological issues of the OSI-SP and SEQ within elite youth sport where future research should examine the validity and reliability of such measures.

Chapter Seven

GENERAL DISCUSSION

This thesis has presented three sequential studies that have identified, compared, and explored components of organisational stress within academy football environments. It is believed the findings of these studies have furthered theoretical knowledge and understanding of organisational stress (see Section 7.2.2). It is hoped that this contribution could inform practice within academy football in addressing the experiences of organisational stress by players and coaches and the impact it can create (see Section 7.2.1). This chapter will summarise the key findings of each study and the relationship to literature (see Section 7.1); discuss the contribution to knowledge, theoretical considerations, strengths, limitations and future research directions (see Sections 7.2-7.4); and present the main conclusion of the thesis (see Section 7.5).

7.1 KEY FINDINGS

Study 1: Part A

There is a lack of evidence surrounding the perceptions of adolescent players within academy association football. The aim of Study 1 Part A was to interpret the players' perceptions of the academy environment within the youth development phase of academy football since the introduction of the EPPP, with the objective to identify and compare organisational stressors of adolescent players within the youth development phase of academy status 1-3 environments. Stressors identified were pressures and expectations, development and opportunities, balancing act, interaction and communication with significant academy others, and performing as a football player, once again, research that has identified a wide range of interacting factors influencing athletes' behaviour. Category 1 and 3 academy players identified spending less time with family and issues resulting from the long distance between home and club as negative factors associated with attending an academy. However, it is noted the sample of category 2 players may have not cited these stressors due to living locally. With

the addition of new lower-order themes being identified (e.g., balancing football and friendships, football and other interests, football and school, and familiar home match environment), this has highlighted the importance of life outside of football influencing players' experiences within academy football and the conflict between familiar match environment and performance pressure. A key finding from this study was that players reported different perceptions (i.e., positive or negative) of some stressors. Therefore, appraisals and situational properties of stressors for understanding different stress experiences from the same stressors is deemed important to look at.

Study 1: Part B

There is a lack of evidence surrounding the perceptions of coaches in association football since the introduction of the EPPP. The aim of Study 1 Part B was to interpret coaches' perceptions of the academy environment within the youth development phases of academy football since the introduction of the EPPP, with the objective to identify and compare the organisational stressors of coaches within the youth development phase of academy status 1-3 environments. Stressors identified were football clubs' organisational changes, job role and responsibility changes and the impact of these job changes on coaches' lives, once more, research that has identified a wide range of interacting factors influencing coaches' behaviour. The perceptions of the EPPP's impact upon coaches is deemed mostly negative such as changes in some job role and responsibilities (EPPP audit demands, increased organisational demands, increased administrative work, and time for coaching delivery) and the impact of job changes on the coaches' lives (significant other issues, work-life balance issues, and working at home) which also captured stressors related to role conflict issues. Category 2 and 3 coaches reported increased working hours and reduced autonomy as additional negative demands within their job role and responsibilities. However, some aspects of stressors were seen as positive influences upon coaches, which include increased facilities and resources, improved coaching standards and increased coach accountability. Similar to Study 1 Part A, a key finding from this study was that coaches reported different perceptions (i.e., positive or negative) of some stressors. Therefore, appraisals and situational

properties of stressors for understanding different stress experiences from the same stressors is deemed important to look at.

Study 2

Research examining the components of the stress process of youth players in association football is limited. The aim of Study 2 was to explore the adolescent players' organisational stress experiences (stressors, appraisals, emotions) of football academy environments within the youth development phase across a season. Specifically, the objectives were to: identify and examine the stressors, identify and compare the perceived control (appraisals) of stressors, identify and examine the explanations (appraisals) of stressors, identify and examine the emotions associated with stressors, and identify and compare the perceived intensities of emotions. Stressors identified were school education, academy football, school football, external interests, and daily living. Daily living and external interests experiences were prominent stressors throughout the season, thus highlighting the importance of life outside of football for players. Perceived stressor control was seen as fairly controllable, and no significant effects of time on stressor control was found. Players cited player's actions, other people's actions, aspects of academy football, aspects of school, doing activities, part of the daily living routine, and external factors as causes of stressors. In particular, part of the daily living routine and player's actions were the most common stressor explanations throughout the season. Players experienced emotions as a result of stressors through eleven higher-order themes of sadness-depression, happiness-joy, anxiety-fright, pride, relief, shame, anger, guilt, gratitude, hope and love. Specifically, happiness-joy, sadness-depression and anger were prominent emotions, where happiness-joy was the most cited emotion at all three phases of the season. Emotions were perceived as a fairly strong intensity. Time had a significant effect on emotion intensity as mid-season emotion intensity was higher than at the end of the season. Number of stressors and emotions were greatest at the beginning of the season, but significant variation could not be confirmed without statistical analysis. These findings suggest the time of the season could have an important role to play in the organisational stress process.

Study 2: Coaches consideration

Albeit investigating organisational stress of coaches over time is an important area of research, there is still a lack of studies in the field. The aim of this consideration was to explore coaches' organisational stress experiences (stressors, appraisals, and emotions) of the football academy environments within the youth development phase across a season. Specifically, the objective was to identify and examine the organisational stressors, perceived controllability (appraisals), associated explanations (appraisals), emotions, and emotion intensities reported by coaches across a season. Stressors identified were job role and responsibilities, external, match day, player and people associated with the job. Job role and responsibility and external were prominent stressors at all phases of the season, thus highlighting the importance of job role and responsibilities and life outside of football for coaches. Coaches cited job requirements, people at work, coaches doing it for themselves, people outside of work and external as causes of stressors. In particular, people at work and job requirements were the most common stressor explanations throughout the season. Coaches experienced emotions as a result of stressors through ten higher-order themes of happiness, anger, sadness-depression, anxiety-fright, proud, gratitude, relief, shame, compassion, and guilt. Specifically, happiness-joy, sadness-depression and anger were prominent emotions, where happiness-joy was the most cited emotion at all three phases of the season. Emotions were perceived as a fairly strong intensity at each phase of the season. However, perceived stressor control was seen as fairly controllable throughout the season except for moderate control at mid-season. Furthermore, number of stressors and emotions were greatest at the beginning of the season and the least at the end of the season, but significant variation could not be confirmed without statistical analysis. These findings suggest the time of the season could have an important role to play in the organisational stress process.

Study 3

No research to date has examined organisational stressor situational properties, emotions, and recovery-stress in elite youth football in England over a season using standard inventories. The aim of Study 3 was to explore adolescent players' situational properties of organisational stressors, emotion, and recovery-

stress of football academy status environments within the youth development phase across a season. Specifically, the objectives were to identify and compare organisational stressor frequencies, intensities, and duration (situational properties), identify and compare emotions, and identify and compare recovery-stress. Players' organisational stressors were rare, hardly intense and occurred for a short time. Similarly, emotions were felt a little and recovery-stress was low to medium. There was a significant influence of time on team and culture, and selection organisational stressor properties (increasing team and culture stressor duration between beginning and mid-season, decreasing team and culture intensity between mid and end of the season, and decreasing selection stressor frequency between mid and end of the season). In addition, there was a significant influence of time on the emotion of dejection, happiness, and excitement (decreasing dejection between mid and end of season, happiness between beginning and end of season, excitement between beginning and end of season). Finally, there was a significant influence of time on certain aspects of recovery-stress (decreasing fitness/being shape between mid and end of season, burnout/personal accomplishment between beginning and end of season and between mid and end of season, sport-specific recovery between beginning and end of season, and between mid and end of season, global recovery between beginning and end of season). Overall, the findings highlighted the importance of the end of the season and a need for further recovery of players.

7.1.1 Relationship to current literature

Similar findings

Similar to previous research there is a wide range of interacting factors influencing athletes (e.g., Arnold & Fletcher, 2012b; Fletcher et al., 2012b; Reeves et al., 2009). The stressors identified in the thesis are similar to or have been mentioned in previous literature concerning athletes. Players' similar stressors include interactions with significant others (Arnold & Fletcher, 2012b), pressures and expectations, development and opportunities, performing as a player, and academy football such as training and match performance (Reeves et al., 2011).

When identifying further aspects (situational properties, appraisals, emotions) of the organisational stress process within the thesis, time was found to

influence the situational properties of team and culture and selection. The findings of team and culture stressor frequency and intensity decreasing at the end of the season provided support to Roberts et al. (2019) who also found team and culture stressor frequency and intensity from competition to post-competition (end of the time point) to significantly decrease. Furthermore, happiness-joy, sadness-depression and anger were cited as prominent emotions for academy players in Study 2. This partially supports previous emotion research in sports performers who have found happiness (Nicholls et al., 2010) and anger (Neil et al., 2011; Nicholls et al., 2010) as prominent emotions to result from stressors. Players also reported happiness-joy to be the most cited emotion at all three phases of the season in Study 2. This supports Nicholls et al. (2010) who found positively toned emotions were the most frequently cited after favourable outcomes. It is important to note that players did cite one or more emotions with each stressor in Study 2. These findings support previous research regarding people experiencing multiple emotions in any given stressful situation (Folkman et al., 1986) and within sport, players can experience more than one emotion simultaneously (Nicholls et al., 2010).

Similar to previous research there is a wide range of interacting factors influencing coaches' behaviour (e.g., Dixon & Tuner, 2018; Levy et al., 2009). The stressors identified in the thesis are similar to or have been mentioned in previous literature concerning coaches. Coaches' similar stressors include organisational demands, administration, time for coaching delivery (Didymus, 2016; Dixon & Tuner, 2018; Olusoga et al., 2009; Thelwell et al., 2008), external experiences such as time with family (Lundvist et al., 2012) and player experiences such as player discipline (Levy et al., 2009).

When identifying further aspects (situational properties, appraisals, emotions) of the organisational stress process within the thesis, job requirements and people at work were prominent causes of coaches' stressors (appraisal). This highlights the influence of the environment causing stressors to occur, particularly the importance of the job role (as seen in Study 1 Part B) and the importance of work colleagues such as athletes, support staff, managers, and administrators in causing psychological stress or being sources of social support for coaches (see Fletcher & Scott, 2010). Results also revealed happiness-joy, sadness-depression

and anger were prominent emotions felt by coaches. This supports previous academy football research which has found both positive (e.g., enjoyment, which is part of Lazarus' (1999) identified emotion of happiness provoke by favourable life conditions) and negative emotions (e.g., anxiety) to result from stressors (Dixon & Turner, 2018). In other sports anger has also been identified in the sporting process (Keegan et al., 2009; Kerr & Stirling, 2012).

The thesis supports that for academy players and their significant others, their sport performance and training, pressures and expectations, and development and opportunities can be common stressors. Being an athlete within sport results in frequent emotions of happiness and anger, where multiple emotions can result from one stressor. Academy coaches see organisational demands, administration, time for coach delivery, time with family and athlete discipline as common stressors. The thesis supports that the people the sports coaches work with are important causes of psychological stress or social aid and that being a sports coach can result in frequent emotions of happiness and anger.

Additional findings

There have also been new player stressors identified that add to previous literature with sport. The stressors of spending less time with family, long distance between home and club, balancing football and friendships, other interests and school, familiar home match environment, school football, and daily living were identified specific to the football academy environment. By daily living experiences and external interests being prominent stressors throughout a season it highlights the importance of life outside of football (and their stressors) for academy football players. By identifying further aspects (situational properties, appraisals, emotions) of the organisational stress process within the thesis, the situational properties of organisational stressors were found to be rare, hardly intense and occurred for a short time. These properties were similar to Roberts et al. (2019) as Invictus games athletes also experienced similar scores (1 and 2). However, these findings do not support Arnold et al.'s (2015) research where higher frequencies, intensities, and duration of organisational stressors were found, particularly in logistics and operations associated with gender, sport type and performance level.

Academy players experienced emotions as a result of stressors through eleven higher-order themes of sadness-depression, happiness-joy, anxiety-fright, pride, relief, shame, anger, guilt, gratitude, hope and love. The findings provide support to previous literature (Nicholls et al., 2010) that identifies sports performers to display a range of emotions but furthers the understanding that the range of emotions displayed is larger than previously identified (i.e., the addition of shame, guilt, and love).

As a product of the organisational stress process, players' total recovery stress scores were low to medium. This supports Faude et al. (2011) where global stress scores were low and global recovery scores were low to medium. Furthermore, the findings suggest that the significant decrease in fitness/being in shape and burnout/personal accomplishment aspects of the sport-specific recovery sub-scale influences sport-specific recovery and global recovery over time. This does not support Faude et al. (2011) where no significant changes in fitness/being in shape throughout a season were found. However, even though global recovery significantly decreased at the end of the season in both Study 3 and Faude et al. (2011), Faude et al. (2011) found significant decreases in general and sport-specific aspects of recovery, whereas this thesis only found sport-specific aspects.

There have also been new coach stressors identified that add to previous literature. Stressors of EPPP audit demands, working at home, coaching standards, and increased accountability were identified specific to the football academy environment. When identifying further aspects (situational properties, appraisals, emotions) of the organisational stress process within the thesis, coaches experienced emotions as a result of stressors through ten higher-order themes of happiness, anger, sadness-depression, anxiety-fright, proud, gratitude, relief, shame, compassion, and guilt. The specific range of emotions that coaches experience through coaching has not been identified definitively in research (Davis & Davis, 2016). Hence, this research has furthered understanding of the range of emotions coaches experience in sport. Nevertheless, it is important to note that coaches did cite one or more emotions with each stressor. These findings support previous research within sport regarding players experiencing more than one emotion simultaneously (Nicholls et al., 2010), but extend the literature by

reporting coaches can also report different emotions within the same stressor experience.

The thesis highlights new findings relevant to the academy football environment. The long distance between home and club, balancing football and life outside of football (e.g., family, friendships, school, external interests), and daily living activities were new stressors for academy football players. In particular daily living and external interests were prominent stressors that once again highlighted the importance of life outside of football for academy players. However, the organisational stressors from the OSI-SP were rare, hardly intense and occurred for a short time. This finding will be discussed further in section (7.2.1). Being an academy player resulted in additional emotions of shame, guilt and love being displayed compared to previous athlete research (e.g., Nicholls et al., 2010). Possibly due to different sports' stressors resulting in different emotions or different methods of data collection i.e., diaries and questionnaires in this research programme versus interviews in Nicholls et al. (2010). Furthermore, being a football player can result in the recovery-stress levels being low to medium. However, for English academy players sport-specific recovery (i.e., fitness/being in shape and burnout/personal accomplishments) decreased at the end of the season. Academy football coaches identified EPPP audit demands, working at home, coaching standards and increased accountability as new stressors within the academy environment. Since previous research has not identified the range of coaches' emotions, ten emotions were identified amongst academy football coaches in the thesis. Like players' emotions, the thesis identified coaches can feel more than one emotion resultant from a stressor. Overall, the thesis adds to previous research, including research in academy football, since many have focused on participants from multiple sports at multiple professional levels using leading methodological questioning and retrospective design.

7.2 DISCUSSION

7.2.1 Contribution to knowledge

This programme of research has examined the influence of elite football academy environments upon its coaches and adolescent players since the

introduction of the EPPP specifically by examining organisational stress upon adolescent players and coaches within elite football academy environments. The EPPP was an aspect of the research programme to look at since there has a been a lack of studies investigating the influence of the EPPP on players and coaches since it was introduced in 2001 (see Implications for practice in Section 7.2.1). The sequential nature of the three studies allowed for corroboration of findings through different research designs and methodologies. Study 1 interviewed football academy status 1-3 players and coaches to identify their perceptions of the environment within the youth development phase since the EPPP was introduced. This study contributes to the stress model by illustrating the variety of stressors that players and coaches encounter and providing insight into the potential responses of stressor themes. Study 2 used diaries combining qualitative questions and quantitative Likert scales to identify players' and coaches' stressors, appraisals, and emotions of academy environments within the youth development phase across a season. This study contributes to the stress model by illustrating the stressors, appraisals, and emotions from a non-cross sectional perspective that players and coaches experience, providing insight into the potential interface between them, such as the appraisals and emotions resulting from stressors, and highlighting that the components can change over a period of time.

Players cited balancing football and life outside football as a stressor in study 1, whilst school education, school football, external interests and daily living were cited as prominent stressors in Study 2. Furthermore, daily living experiences and external interests experiences were the most prominent stressors for players throughout the season in Study 2. These findings from the studies corroborate the importance of life outside of football and maintaining a healthy balance between academy football and life outside of football. Organisational stress is an interaction between the individual and the sports environment (Woodman & Hardy, 2001). Therefore, the results suggest that players interacting with the academy environment influences the players' outside lives. This can be a bilateral relationship as the individual and their reactions can have an effect on the environment (Fletcher et al., 2006). Hence the corroboration of results contribute to stress theory by highlighting that organisational stress is not mutually exclusive from other types of stress and stressors, rather organisational stress can influence and by influenced by the stress experienced by the individual. In addition, players

cited development and opportunities, interaction and communication with significant others, and performing as a football players as stressors in Study 1, whilst academy football was a stressor in Study 2. These findings from the studies corroborate the individual stressors within an academy environment a player experiences. The verification of findings from different methodologies provide an up-to-date, comprehensive view of stressors within academy football. Thus, building upon previous research and showing further insights into new stressors for specific sports organisations.

Coaches cited job role and responsibility changes as a stressor in Study 1, whilst job role and responsibilities were also seen as a stressor in the consideration to coaches section of Study 2 (see Section 5.6). It was deemed important to continue investigating organisational stress over time within coaches, despite the limited sample of coaches, as there is a lack of research examining this area. Coaches also cited the impact of the job changes on the coaches' lives as a stressor in Study 1, whilst external experiences were seen as a stressor in the consideration section. Furthermore, Study 2 revealed external experiences were also prominent stressors among coaches. These findings corroborate the increased importance of the coaches' job role and responsibilities and life outside of football. Similar to players, the results suggests that coaches interacting with the academy environments influences the coaches' outside lives suggesting organisational stress is not detained within the remit of the organisation and the individual (i.e., the individual state is paramount in transacting with the organisation and outside the organisation). Furthermore, the verification of results from different methodologies provide an up-to-date, comprehensive view of stressors within a specific sports organisation from a coach perspective.

Study 3 used quantitative standardised inventories to assess players' situational properties of organisational stressors, emotions, and recovery-stress of academy environments within the youth development phase across a season. This study contributes to the stress model by illustrating the situational properties of organisational stressors, emotions, and recovery-stress that players experience, and highlighting that these components can change over a period of time. A further theoretical contribution is that Study 3 offers support for examining an expanded conceptualisation of organisational stressors i.e., frequency, intensity,

and duration. Specifically, Study 3 identifies variation in some dimensions of stressors according to the time of the sporting season.

Time has a significant influence on players' perceived emotion intensity by decreasing from mid-season to the end of season in Study 2, whilst time also had a significant influence on emotion intensity by decreasing dejection from mid to end of the season, happiness between beginning and end of the season and excitement between beginning and end of the season in Study 3. These findings corroborate that time decreases emotion intensity in two of the prominent emotions (happiness-joy and sadness-depression) at the end of the football season. The verification of results by different methodologies contributes to the theory of stress by supporting that stress is an ongoing process (Cooper et al., 2011), and therefore research must consider longitudinal design (Arnold et al., 2013) and identify the temporal nature of emotion intensities.

The occurrence of academy football stressors within Study 2 suggests a greater frequency than the sports organisational stressors within Study 3 (e.g., rare for goals and development, logistics and operations, team and culture, and coaching). The difference in findings is surprising since in Study 1 players cited development and opportunities, interaction and communication with significant others, and performing as a football players were stressors that are similar to the stressors within the OSI-SP. A theoretical contribution is provided that findings do offer support for the development, team and coach demands players face within academy football and that the measures used are relevant to sport. The differences in frequencies highlights to the value of using a mixed method approach, for example identifying and rectifying any methodological issues for differences in results. Specifically in this case, the need to consider age when using psychometric inventories designed for adults.

Players' perceived emotion intensity was cited as fairly strong for the total season and for each phase of the season in Study 2, whilst emotions overall averaged around 'a little' by players where happiness and excitement were felt closer to 'moderately or 'quite a bit' and anxiety, dejection and anger were felt closer to 'not at all' over the season in Study 2. These findings show a difference in emotion intensities within Study 2 and 3. Despite the acknowledgement that in Study 2 emotion intensity incorporated all the emotions cited by players and Study

3 was individual emotions, Study 2 individual emotion data tended to be a lot higher than in Study 3. A theoretical contribution is provided that findings do offer insight into positive emotions being felt at a higher intensity within sport. Therefore, it is important to consider positive and negative emotions within organisational stress. Similar to the differences of organisational stressor frequencies in Study 2 and 3, the differences in emotion intensities highlight the value of using a mixed method approach, for example identifying and rectifying any methodological issues for the results. Specifically in this case, the time of completion, the emotion relating to a stressor rather than a general feeling, and the consideration of age when using psychometric inventories designed for adults.

Overall, the three studies of the research programme assessed several components of the stress process. As suggested by Arnold et al. (2013), research should strive to measure the overall stress process, including stressors, appraisals, responses, coping and outcomes. However, measuring all the components was not considered pragmatic in the present programme of research. It was decided that it would be more appropriate to begin by identifying stressors in Study 1 and building upon this in the further studies by identifying stressors plus additional components using a mixed method approach. Therefore, the thesis provided an added theoretical contribution to an in-depth understanding of stress process within football academies.

Implications for practice

The dynamic nature of the organisational stress process upon players and coaches within the academy environment has been established in this thesis. Particularly for players, the findings suggest that family are valuable for a player within a football academy. In addition, to spending time at the academy, the travel time over the long distances between the players' homes and football academy contributes further to the lack of time with family for players. These findings could help practitioners within the football club to work with the family in providing effective support for player development and highlighting the importance of the family role. Furthermore, coaches should consider the negative affect travelling far to and from the football academy may have on performance and the time spent away from home may have on players' well-being.

The importance of family for players is a subcomponent of the overarching prominent findings of this thesis which is the battle between life outside of football and life being an academy player. The EPPP could be a potential mechanism behind the effects of such a stressor. Players' data was not collected pre-EPPP so it cannot be a comparison of what players have experienced before and after the EPPP. However, the increased coach contact hours and 1.5 hours recruitment distance/time from the academy presented in the EPPP could be possible explanations for the reduction in time outside of football. Adapted from work-family conflict (Dixon & Bruening, 2005) players can experience a football-life conflict where academy football affects life outside football and life outside football affects academy football. Based on these findings, and that the EPPP recommend an optimal environment for talent development, football clubs could provide help to alleviate these increased football-life demands in order to reduce conflict and the impact it has on the players' academy football and life outside of football.

Since the introduction of the EPPP, coaches reported increased working hours due to the work demanded by the EPPP's requirements. With the lack of finance for category 2 and 3 clubs to employ additional staff to manage the increased workload, this impacts the coaches already at the clubs. These findings could inform academy managers and the Premier League of the potential negative impact the EPPP has had upon its coaches. Furthermore, category 2 and 3 coaches cited a reduction in coach autonomy. The Premier League and head coaches designing coaching syllabuses could potentially work to incorporate a more autonomous supportive environment that encourages coach decision-making, choice and perspectives. Increased autonomy could lead to improved cognitive and behavioural performance (see Legault & Inzlicht, 2013), less emotion and physical exhaustion by coaches (Adie et al., 2008) and less turnover rates from coaches (Fry & Gano-Overway, 2010).

The increased working hours is a subcomponent highlighted by coaches which affects the prominent issue job roles and responsibilities impacting life outside of football. Coaches since the EPPP felt managing the different aspects of the new job role and its responsibilities was a strain, and the work-life balance issues were negative aspects of the impact of job changes. Given that role conflict can be a predictor of burnout (Goodger et al., 2007) and lack of personal time

alongside lack of time with family and friends are reasons for coaches leaving sport (Frey, 2007), football clubs may consider providing support to alleviate role conflict and provide a better work-life better for the coaches. Overall, the negative perceptions by coaches of the EPPP could be considered for a review of the EPPP by the Premier League.

Both players and coaches do not respond the same way to the same stressor. Individuals can differ in their thoughts, emotions, and actions despite sharing the same social groups and environmental stimulus (Lazarus, 1999). This is consistent with Lazarus' (1999) stress theory in which the difference is due to the interaction of biological origins, individual differences, developmental experiences and situational characteristics. Football clubs may consider the different reactions to the same stressors by their players and coaches and provide appropriate individually tailored support or stress management strategies when deemed necessary. For example, some players deem the familiar home match environment as a negative due to the performance pressures, yet others see being familiar with the match environment as a positive. Football clubs could recognise the differing reactions by their players to home match days and utilise this knowledge for better match preparation with the ideal to maximise home advantage and minimise performance pressures. Additionally, players and coaches also have prominent causes of stressors throughout the season. Players deemed daily living routine and players' actions, whilst coaches deemed job requirements and people at work as prominent. From an applied perspective, if the stressor is perceived to have a negative effect on the players and/or coaches, practitioners could help the player/coach deal with the prominent cause of the stressor in turn potentially removing the stressor in the sporting environment.

Overall, the deeper understanding of football academy environments among adolescent players and coaches obtained from the thesis contributed to possible implications for practice. In line with the EPPP's aim, recommendations were made which should enhance the optimal environment for talent development in the form of providing appropriate levels of support to its players, their families, and coaches. These recognise the importance of balance between life at the academy and life outside the academy, varied reactions to stressors and dealing with the cause of the stressor.

7.2.2 Theoretical considerations

As mentioned in the previous section, this programme of research has examined and advanced understanding of various components of stress theory specific to players and coaches within elite football academy environments. The thesis has used organisational stress theory and applied it to the world of youth football. Since the majority of organisational stress research in sport has been aimed at various sports with an adult population and the bulk of elite football research is applied, the research programme has begun to bridge the gap between theory and applied research in football.

Woodman and Hardy (2001) believed that differentiating the origin of stressors helps understanding because different cognitive processes underlie the different stressors. Origins of stressors were separated into organisational stressors (issues directly related to the sport organisation e.g., coaches, selection), competitive stressors (issues that directly related to sport performance e.g., opponents), and personal/life stressors (issues that are not directly related to the sport organisation e.g., family). Study 1 Part A and B, Study 2 and the consideration for coaches in Study 2 support the notion of personal, competitive, and organisational origins of stressors (Mellalieu et al., 2009; Nicholl et al., 2009; Woodman & Hardy, 2001). The terms of the stress process are based on general psychology hence modified versions of concepts are introduced for the application in a sporting context, for instance, in Study 1 Part B personal stressors were found for coaches and the competitive stressor definition for athletes was adapted and redefined as a performance stressor for coaches (issues arising from the performance of the coaches' athletes or their performance in a coaching capacity; Thelwell et al., 2008). Identifying that the sport related stressors could be categorised as personal, competitive, or organisational, where each category could pose different demands for the individual (Potts et al., 2018), contributes to the theoretical model by illustrating the variety of origins of stressors that sports performers and coaches encounter.

It is important to consider context within organisational stress (Woodman & Hardy, 2001). For example, competitive stressors within the talent development environment of academy football is tentative. Competition is not the focus throughout the structural phases players progress through within football

academies, development is. The EPPP was introduced to improve every aspect of player development (The Premier League, 2011). Hence, Mills et al. (2014) suggested the cultivation of appropriate development climates in which to nurture young players into professional players. Therefore, it might not be appropriate to define any issues related to sport performance within academy football as competitive stressors. The focus within youth sport should be on the overall development and not solely competitive performance of the performer. It is suggested within Study 1 Part A and Study 2 that issues directly related to sport performance and player development could be redefined as developmental stressors, and competitive stressors could be considered as issues directly related to match performance (for football). This contributes to theoretical knowledge as it provides insight into the context of sport contributing to the origins of stressors that sports performers encounter. If this new definition of competitive stressors is agreed, within this thesis competition stressors are still experienced by players. This suggests that the focus within academies since the EPPP still has an element of competition and the EPPP needs to further focus on development climates throughout the structural phases of academies.

The research programme has highlighted some concerns regarding the origins of stressors. Firstly, stressors can have a single origin or multiple origins. It was identified in Study 1 Part A and B, and Study 2 that some stressors were from a combination of competitive, organisational, and personal origins. For example, balancing football and life outside football for players and coaches could be deemed as an organisational stressor since it is directly related to the sport organisation and it could also be deemed as a personal stressor as they are also not directly related to the sporting organisation. It is proposed from the thesis that the origins of stressors are not mutually exclusive and are interlinked not discrete variables. This has contributed to theory by advancing the knowledge of origins of stressors by illustrating the multiple origins a stressor may have.

Secondly, it is believed the appraisal of the origins of stressors can give rise to that specific aspect of stress, for example, the appraisal of competitive stressors can give rise to competitive stress (Mellalieu et al., 2009). However, since the origins of stressors could not be mutually exclusive suggests that the type of stress an individual experiences could also not be mutually exclusive. Hence, an

interaction between the individual and sports environment deriving from multiple origins of stressors could also arise other forms of stress. Therefore, during organisational stress, individuals might also experience other forms of stress. Differentiating between specific components of the stress process, such as competitive and organisational stress can help understanding (Fletcher & Hanton, 2003), particularly in pinpointing influences on emotional well-being (Lazarus, 1999) and sporting performance. However, with the research programme showing the importance of the sport organisation, competition, development, and life influencing performance and well-being, it may be advised for research to examine all aspects of stress as the inter-related components may provide a more accurate representation of experiences encountered by individuals within sport.

A key finding from the research programme was the importance of appraisal and relational meaning in the stress process. Study 1 Part A and B found different perceptions of some of the same stressors, whilst Study 2 and the consideration of coaches found differing emotions from some of the same stressors. Appraisals are evaluations of situations that are influenced by an individual's beliefs, goals, and/or values and the meaning they ascribe to such encounters (cf. Lazarus & Folkman, 1984). Organisational stress resides neither in the individual nor the work environment but rather in the individual's appraisal of the situation within the work environment (Lazarus, 1996). According to the transactional approach it is not the stressor itself that leads to a stressful appraisal but the individual's appraisal of the stressor relevant to their well-being (Lazarus & Folkman, 1984). It may be that certain stressors generate certain responses, but this cannot be applicable to the whole population (as seen in Studies 1 and 2). Hence, it is the primary and secondary appraisal based on the individual's relational meaning as to the emotions, coping and responses generated (Lazarus, 1999). This contributes to theory by supporting the stress model of Lazarus (1999). In particular, to focus on primary (irrelevant, benign-positive and stressful) and secondary (harm/loss, threat, challenge and benefit) appraisals of the individual in research and in practice.

Lastly, Folkman et al. (1986) suggested that individuals are likely to experience numerous emotions in any given stressful situation, which can have more than one implication for well-being. Study 2 and the consideration of coaches

have partially supported this notion by identifying multiple emotions resultant from one stressor. However, not all multiple emotions arose from stressful appraisals; situations could also be evaluated as not threatening or harmful (irrelevant appraisals) and potentially enhance well-being (benign-positive appraisals). Since emotions are aroused when a situation is appraised in relation to personal significance for well-being and coping options available (Lazarus, 1982), these findings contribute to and further Person-Environment theory by suggesting that a situation can be appraised in several ways to arouse different types of emotions. Furthermore, the findings could advance theory by suggesting that the stress model is not linear in that one stressor does not arouse one appraisal, coping strategy, outcome, and emotion. Similar to the multiple origins of stressors, multiple emotions can be generated after primary and secondary appraisals. Therefore, the stress model could provide different pathways of the process which are all inter-related as a result from a situation experienced. In practice, studying inter-related variables of sports performers and coaches would be time consuming and so, breaking down the stress components into more manageable chunks for investigation is still warranted in sport.

7.3 STRENGTHS AND LIMITATIONS

The strengths and limitations associated with the three studies reported in the thesis are displayed in Table 7.1. In addition, it is worth commenting on the more general strengths and limitations associated with this programme of research. A main strength is the access to elite football academies. To elaborate, Pain and Harwood (2004) revealed a range of barriers faced by sport psychologists within English football (e.g., misconceptions of psychology, psychologist integration within environment, and scepticism of staff). Alongside this football academies can be classed as a hard-to-reach population where researchers must build a rapport and show interpersonal skills to the gatekeepers to gain access (LeCompte & Schensul, 1999; Woolway & Harwood, 2019). Furthermore, upholding confidentiality is a central tenet of psychological research and any club wanting to know the results of their players would not take part in the research. Additionally, there was approximately 4250 players and 126 full-time youth development coaches available for inclusion in the research programme,

with thousands of players leaving the academy system every year (Conn, 2017a). These range of potential barriers may prevent the successful entry to psychologists within the football academy environment and making a large sample size for the research programme, especially for longitudinal studies, difficult. Therefore, by accessing seven football clubs in Study 1, five in Study 2 and two in Study 3 for players and seven football clubs in Study 1 and five in the consideration for coaches allowing for 36 players in Study 1, 30 players for Study 2 and 16 players for Study 3 to participate in all three phases of the season (for Study 2 and 3) and 15 coaches in Study 1 and 16 in the consideration is a major strength of the thesis. This stand-out aspect of gaining access to a hard-reach population with adequate sample sizes has allowed understanding of stress theory into a relatively new population within sport and enabled the organisational stress process to be further explored using a mixed method approach.

Table 7.1. Strengths and limitations associated with three studies in the thesis

Strengths	Limitations
• Study 1 explores a new area of research using qualitative methods	
• Study 1 takes into consideration the different academy category environments	* Retrospective recall from interviews for Study 1.
• Study 1 methodology contained no misleading questions e.g. into group cohesion and/or interpersonal characteristics or stress definitions within the interview process.	* Study 1 needed to consider longitudinal prospective experiences
• Study 2 used prospective longitudinal methods to identify organisational stress experiences over a season.	* There was a dropout rate of players from 160 to 30 in Study 2 and 15 to 11 coaches for the consideration of coaches within Chapter Five.
• Study 2 allows repeated measures to compare players' aspects of the organisational stress process over a season.	
• Study 2 does not include checklists within the diary.	* Possible respondent fatigue in Study 2 and Study 3.
• Study 3 looks at recovery-stress in elite youth football over a season within the context of organisational stress.	* The sample size was too low when considering coaches experiences within Chapter Five to undertake a repeated measures design to compare stress components over the season.
• Study 3 used quantitative standardised inventories.	
• Studies 1-3 take into consideration the youth academy phase of the academy structure	* There was a lack of recruitment, limited number of youth development phase coaches and a lack of inventories for coaches to replicate Study 3 for coach participants.
• All studies have taken place since the introduction of the EPPP.	

• Focus on participants of one sporting organisational structure, professional level, the same sex participants, same sport. • Identified further components of the organisational stress process for the participants within academy football (stressors, situational properties of stressors, appraisals, emotions and responses). • The studies allow for positive and negative outcomes of organisational stress to be found.	* The SEQ and OSI-SP may not be applicable to youth academy football players. * There is no examination of the relationships between the organisational stress components in the thesis studies.

Regarding limitations, it is clear from Table 7.1 that there is a shortcoming preventing Study 2 and 3 becoming a realisation for coaches and that is the limited number of youth development phase coaches. To overcome the barriers of entry (see Section 3.6) is a challenge for recruitment of coaches but in addition there is approximately 126 required full-time youth development coaches in the English Football League for inclusion in the research programme (approximately 40 category 1, 42 category 2, 44 category 3 club coaches), which limits the sample size further. By having a low sample size, it did not allow for statistical analysis to compare coaches' control of stressors and emotion intensities at different phases of the season as a possible Study 2 Part B. Furthermore, it did not allow for a corresponding Study 3 for coaches regarding statistical analysis comparing different components of the stress process longitudinally dependent on Study 1 and Study 2's findings e.g., stressors, emotion, and burnout. Therefore, the examination of organisational stress upon coaches within elite academy environments was not as in-depth as was first hoped. In view of the coaching limitations, before striving to measure components of the stress process it would be more appropriate to start by developing a measure of stressors before advancing to other facets of the stress process. Lazarus (1990) recommended to create a series of measures that assess the key components of the stress process and then to capture the relationships among them.

A further limitation of this programme of research was the drop-out rate of players within the longitudinal studies. Of the 160 players who agreed to take part in Study 2 only 30 players completed diaries for each phase of the season. Of the 27 players who agreed to take part in Study 3 only 16 players completed every psychometric for each phase of the season. High numbers of participants dropping out mirrors other longitudinal research (e.g., Nicholls et al., 2006; Reeves et al., 2011). This illustrates the reality of collecting longitudinal data in professional sport organisations. It is beneficial to have a large sample size in order to be more representative of the population (Field, 2013). Thus, allowing for a better of picture of organisational stress upon adolescent players within the youth development phase of football academies. However, for the purpose of Study 2 and 3, gathering data from a hard-to-reach population with similar sample sizes of previous longitudinal sport research (e.g., Didymus & Fletcher, 2012, 2014; Faude et al.,

2011, Noon et al., 2015; Reeves et al., 2011) was deemed a strength of the research programme.

7.4 FUTURE RESEARCH

This programme of research has helped to advance knowledge and understanding of organisational stress within academy football. To further knowledge in this area, future research directions emerging from the three studies in the thesis are reported in Table 7.2. The remainder of this section will address some of the main points from Table 7.2 and general suggestions for prospective research on organisational stress within youth sport. It will be separated into two sections: measurement development and other areas of the organisational stress process.

7.4.1 Measurement development

Following the use of the OSI-SP in this programme of research it is suggested that future research examines the validity and reliability of the inventory for a youth elite sport athlete population. Differences have been found between males and females, team and individual based sports performers, and professional levels (Arnold et al., 2016). However, age was not considered when examining the demographical differences in performers' OSI-SP data. It would be hard not to assume that sports performers' organisational stressors are different when young compared to at the end of their career even within the same sport. For example, Reeves et al. (2011) found similarities (e.g., making errors, team performance) and differences (e.g., family for early, contracts for middle) between early and middle adolescent academy player stressors. Thus, suggesting differences can occur at different ages within the youth development stages of academy football. Furthermore, in the development and validation of the OSI-SP studies 1-4 participants' ages ranged from 18-78 years old (Arnold et al., 2013). Therefore, the OSI-SP has failed to recognise the stressors of sports performers aged under 18. It is recommended that a similar design, delivery, and development to Arnold et al.'s (2013) work be conducted for elite youth sport performers under the age of 18 to build a valid and reliable organisational stress indicator for youth sport

performers. For example, stressors identified in Study 1 and 2 could be used to present possible inventory items.

As acknowledged at the beginning of Chapter Six the lack of recruitment and limited numbers of youth development phases coaches contributed to Study 3 not taking place for coaches. Despite this, if there was sufficient participant numbers there are no standardised inventories measuring organisational stress in coaches within the UK. Fletcher and Scott (2010) plus Arnold within her thesis identified the need to develop and validate future measures to assess organisational stressors encountered within competitive sport by coaches. Kubayi et al. (2018) have developed the Stressors in Sports Coaching Questionnaire (SSCQ) among South African sports coaches. Kubayi et al. (2018) noted that this psychometric could be adapted to work in different countries. Similarly to Kubayi et al. (2018) and Arnold et al. (2013) studies developing the SSCQ and OSI-SP respectively could be adopted to develop and validate an organisational stressor indicator for sports coaches. For example, stressors from Study 1 and 2 as well as previous research such as Dixon and Turner (2018) and Kubayi et al. (2018) could provide examples of possible inventory items. This would make significant advances in the understanding of organisational stress and build upon the growing body of knowledge of organisational stress within sports coaches.

Table 7.2. Suggested future research directions emerging from three studies reported in the thesis

Study	Suggested future research directions
1A	- Recognise that stressors should be viewed as interlinked and not discrete variables. - Focus on performers' cognitive appraisals of the organisational stressors encountered and identify the demands and transactional alternatives athletes experience in relation to the situational properties to gain explanatory potential for a better understanding of stress experiences in elite youth football. - Exploration into adapting work-family conflict from sport management research into football-life conflict for players. - Adopt longitudinal prospective designs to reflect the importance of contexts in examining ongoing stress experiences over time (began to address this in Study 2 and 3). - Include contextual characteristics that influence the stress process to account for variance in reactions across athletes e.g. development phases in academy structure.
1B	- Recognise that stressors should be viewed as interlinked and not discrete variables. - Focus on coaches' explanatory potential of the concept of appraisal to shed a light on the reasons behind coaches' diverse stress experiences. - Address the lack of longitudinal prospective designs amongst coaches in order to reflect the importance of contexts in examining the stress experiences unfold over time.
2	- Recognise that stressors should be viewed as interlinked and not discrete variables. - Compare frequencies between stressors at specific phases of the season to statistically determine if time influences the number of stressors players experience during a season. - Investigate the types of stressors, levels of self-efficacy and situational properties within to provide a further understanding to if any certain type of stressor is more controllable than others. - Compare the frequency of emotion at specific phases of the season to statistically determine if time influences the number of emotions players experience during a season. - Explore the types of emotion and their intensity over time to further understand specific responses to stressors by players in academy environments.

Consideration	-	Compare frequencies between stressors at specific phases of the season statistically to determine if time influences the number of stressors coaches experiences during a season.
	-	Explore perceived control of stressors amongst coaches using a within-subjects approach across a season.
	-	Compare cause frequencies, emotion frequencies and emotion intensities at specific phases of the season statistically to determine if these variables change significantly over time.
	-	Explore the factors that underpin coaches experiencing positive and negative emotions in the sport setting e.g., stressor situational properties.
3	-	Examine the validity and reliability of the OSI-SP in elite youth football.
	-	Explore the relationship between team cultural aspects such as team identity, team efficacy and team cohesion, and team and culture stressors over time.
	-	Investigate specific types of emotions rather than general emotion in sport further.
	-	Explore possible explanations of athletes experiencing positive emotions in sport.
	-	Examine the relationships between appraisal, emotional regulation, and emotional exhaustion (alongside burnout) with emotion intensity over a season.
	-	Investigate the relationship between objective physiological data and subjective psychological data over a season to further develop the line of research explaining burnout.
	-	Investigate the relationship between situational properties, emotions, and recovery-stress.
	-	Examine the validity and reliability of the SEQ in elite youth sport.

7.4.2 Other areas of the stress process

It is suggested within Table 7.2 that future research on organisational stress continues to investigate the components of the process examined throughout the thesis and the relationships between stressors, appraisals, emotions, and outcomes. Beyond the scope of the research programme was the component of coping and this would be recommended to include when examining the organisational stress process. When investigating the relationships of components, it must be advised to not operationalise the components as static entities but rather an on-going interlink amongst stress-related constructs and multi-directional causality (Fletcher et al., 2006).

In relation to appraisals in the stress model (Lazarus, 1999), Table 7.2 has highlighted possible areas of future research into focused analytical work on appraisal i.e., appraisals and positive/negative emotions, and appraisals of same stressors and different outcomes. Appraisals are evaluations of situations that are influenced by an individual's beliefs, goals, and/or values and the meaning they ascribe to such encounters (cf. Lazarus & FLokman, 1984). To further understanding of the stress process, future research should consider relational meaning and appraisals. Relational meaning understands why individuals differ in their thoughts, emotions, and actions despite sharing the same social groups and environmental stimulus (Lazarus, 1999). Persons differ in goals, beliefs, and resources due to the interaction of different biological origins and developmental experiences (Lazarus, 1999). It is clear from previous research (e.g., Didymus et al., 2012; Neil et al., 2011) and from this thesis that appraisal mechanisms are an important component of the organisational stress process in competitive sport. Hence supporting the notion that cognitive appraisal is the theoretical heart of psychological stress (Lazarus, 1999). Though some psychometric inventories exist to measure cognitive appraisal, questions have been raised concerning their validity and reliability (Schneider, 2008). Yet there are standard inventories relevant to the goals, beliefs and values pertaining to relational meaning such as in the theory of planned behaviour and achievement goal theory. Future research could consider a mixed method approach using alternating research methods such as the continuation of diary methods or the stress appraisal logs when examining

appraisals and psychometrics measuring aspects of relational meaning to provide a deeper understanding into the evaluations of stressors.

Overall, the main future research areas to examine from the thesis are: to build a valid and reliable organisational stressor indicator for youth sport performers to allow for the age demographic to be considered in the sport context; to develop and validate an organisational stressor indicator for sports coaches since there are no standardised inventories in the UK; and to use a mixed method of diaries and psychometrics to examine the relationship between stressors and appraisals to further understand the evaluations of stressors in sport.

7.5 PhD REFLECTION

A fitting way to end the thesis is to reflect on the PhD journey. Like life, the developmental journey towards completing a PhD has had its ups and downs. The positives included simple aspects such as completing sections of the thesis, successfully collecting data, improvement in writing and accomplishing progressions, ethics and training set out by the university. Negative aspects included the struggle to obtain participants, getting to grips with new analysis methods and building a story throughout the PhD. However, these can be deemed as surface level aspects of completing a PhD which any researcher could face. For me, there were far greater hurdles to climb. During the PhD programme I had two gorgeous children, which completely changed my life. After both maternity leaves, I had to juggle looking after small children and continuing the PhD. In addition, there were some exceptional circumstances at the university and at home and the coronavirus which resulted in additional time being added to the PhD deadline. This has led to the research programme being suspended and restarted several times and so the pure focus became on the completion of the thesis when time allowed. As a researcher my determination and organisational skills have been necessary to get this far. As a person there were times when you felt low, but these are the times when you can reflect to see what is important. This allowed me to build strength in my convictions and build self-confidence to achieve what I wanted. I kept the fight going. The key lessons I would express to any researcher or student is of course you will experience common issues with

developing research, but you need to listen to yourself. Tackling a PhD when you are not ok will make it a lot harder. Make sure you are alright; then this will allow you to progress in your PhD.

7.6 CONCLUSION

To conclude, increasing research has emerged detailing the wide range of demands sports performers and coaches face that could lead to poor performance and impaired well-being. However, there has been a lack of organisational stress inquiries into elite youth sport, particularly in football. Therefore, the aim of this thesis was to examine organisational stress upon adolescent players and coaches within elite academy football environments. To achieve this purpose, a series of three sequential studies was conducted that aimed to: identify the players' and coaches' perceptions of the academy environment within the youth development phase of academy football since the introduction of the EPPP; identify players' (and coaches') organisational stress experiences (stressors, appraisals and emotions) of the football academy environments within the youth development phase across a season; and identify players' situational properties of organisational stressors, emotion and recovery-stress of football academy environments within the youth development phase across a season. The results illustrated a wide range of interacting factors encountered by players and coaches, particularly highlighting the importance of life outside of football influencing players' experiences within academy football and the negative impact of the EPPP on job roles and responsibilities and life outside of football for coaches. The results also highlighted that perceived stressors were fairly controllable, and the most prominent stressor explanations were daily living routine and player's actions for players and people at work and job requirements for coaches. The findings of the thesis illustrated that the end of the season is important. Time had a significant effect on some aspects of the situational properties of organisational stressors, emotions, and recovery-stress, where the aspects tended to be significantly lower at the end of the season although an increase in team and culture duration was observed between beginning and mid-season. In addition, the sequential and mixed methods approach to the research programme demonstrated differing results for organisational stressor frequency and emotion intensity. These

conclusions should be viewed in light of the limitations of the studies such as respondent fatigue and appropriateness of psychometrics.

The studies reported in this thesis have accessed a hard-to-reach population to provide new insights into a phenomenon despite the small population and dropout rates. The research programme has helped to develop a better understanding of the stress process within academy football and has suggested how the findings may be applied in practice to address organisational stressors, appraisals, emotions, and recovery-stress; in doing so, it may enhance individuals' experiences within academy football. Theoretical knowledge has also advanced in relation to knowledge of multiple origins of stressors and emotions suggesting that the stress model has numerous pathways throughout the process which are all inter-related. This supports the suggestion of further research into the relationships between the organisational stress components in academy football. It is apparent from the thesis that appraisal and relational meaning are the core to organisational stress, therefore it is suggested that researchers in this area adopt a mixed method approach to unfold appraisals within stress in sport further. Finally, it is likely that data gathered can be affected by the standardised inventories used and so it is recommended that appropriate measure developments are made purposely for youth elite athletes and coaches in this area.

Appendices

Appendix 1: Summary of current organisational literature

Study Authors and Aims	Method	Main Findings	Limitations and Future Research
Arnold et al. (2015) examined if a range of organisational stressors and their dimensions varied as a function of sports performers' gender, sport type and performance level.	1277 sport performers of different gender, sport, performance level completed OSI-SP online.	Frequency, intensity and duration of some stressors differed between male and females, team and individual sports, and higher-level and lower level performers.	Future research to reduce variance by sampling participants from a gender, team or individual sport at a specific level.
Arnold et al. (2017) examined relationships between organisational stressors on positive affect, negative affect, performance satisfactions and coping styles.	114 male and female sport performers from different sports completed OSI-SP, MCOPE, PANAS and performance satisfaction measures online.	Goals and development duration and intensity as well as team and culture frequency and intensity had a main positive effect on negative affect. Importance of situational aspects of stressors since exclusion has been a shortcoming in previous research in sport.	Future research should employ longitudinal designs to establish nature of relationship between stressors and outcomes. Future research should test hypotheses with multiple dependent variables.

Arnold & Fletcher (2012b) developed a taxonomic classification that provides an applicable framework to classify organisational demands in athletic contexts.	Used a meta-synthesis on 34 studies of a large number of sport performers used to classify primary and secondary related organisational stressors.	Categories identified: leadership and personnel, (management and support of a sports team), cultural and team (attitudes and behaviours within a team), logistical and environmental (operations for training and/or competition), and performance and personal issues (athletic career and physical self).	New demands will emerge in specific sport environments due to the complex and continually evolving nature of sport organisations.
Didymus (2017) examined situational properties, appraisals and coping.	Used CMRT to explore after interviewing 6 female and 9 male international, individual and team coaches.	10 stressor themes were underpinned by 7 situational properties appraised mostly as a challenge and threat.	Limitation was the use of retrospective interviews and the transferability of findings to specific sports settings.
Didymus & Fletcher (2012) identified demands and the transactional alternatives that athletes experienced in relation to each situational property.	8 male and 7 female high standard swimmers completed the adapted SAL for 28 days.	Stressors were grouped into logistical and environmental, cultural and team, performance and personal, and leadership and personnel issues. Imminence was associated with the largest number of threat, novelty with challenge, and duration with harm/loss appraisals.	Data analysis procedures implemented deductively aligned themes to theory and research which could compromise novelty of findings. Swimming could account for certain types of situational properties of stressors. Future research should consider components of stress process over time.

Didymus & Fletcher (2014) examined organisational stressors, appraisals and coping longitudinally	High standard male and female swimmers completed an adapted SAL, identified coping strategies and perceived effectiveness on Likert scale for 28 days.	Stressors were deductively analysed under Arnold & Fletcher's (2012) dimensions. Alluded to gender being a moderator of the organisational stress process in sport.	Deductive alignment to theory and research which could compromise novelty of findings. Swimming could account for certain types of stressors. Future research could take into consideration gender when examining organisational stress.
Dixon et al. (2016) quantitatively examined elite youth academy football coaches' relationships between challenge and threat appraisals of stressful events with behaviour.	105 football academy coaches completed SGABS, ALE-scale and LSS online.	Positive association between threat appraisal and autocratic behaviour and challenge appraisals and social support, negative association between threat appraisal and positive feedback and higher irrational beliefs associated with greater threat appraisals.	Recall of details of stressful events over last month could impair retrieval process.
Dixon & Tuner (2018) examined stress appraisal for UK football academy coaches.	7 full-time coaches were interviewed using IPA and asked to rank stressful situations to stimulate discussions.	Range of stressors that created pressure, anxiety and damage to self-esteem were identified.	Incomplete depiction of range of stressors by focussing on certain stressful situations.
Fletcher & Hanton (2003) adopted Woodman and Hardy (2001) framework to examine demands encountered by sport performers when discussing international competitions.	Interviewed athletes from various sports and data were content analysed.	Additional high-order themes of travel and competition environment within the environmental area and expectations within the personal area of the framework.	Conceptual origins of the Woodman and Hardy (2001) framework may pose subsequent bias toward group cohesion and interpersonal dynamics.

Fletcher et al. (2006) provided a review of current issues in organisational stress in competitive sport.	Conceptual and operational considerations and theoretical relationships based on a meta-model.	Proposed three-level hierarchy organisational framework integrating organisational and sport psychology consisting of five dimensions.	Framework may be biased or not completely relevant to sport due to the influence from non-sporting occupations.
Fletcher et al. (2012a) used Fletcher et al.'s (2006) framework to investigate athletes' responses to organisational stressors.	6 male and 6 female athletes from 5 different sports and levels were interviewed.	Not all performers reacted the same way to stressors encountered.	The framework may be influenced by a priori knowledge of organisational stressors from a wide range of non-sport occupations. Future research should focus on appraisals.
Frey (2007) examined coaches' stress experiences, perceived effect on coaching performance and coping strategies.	10 collegiate coaches were interviewed.	Indicated multiple sources of stress and perceived both facilitative	Limitation is the transferability of findings to specific sports settings. and debilitative effects.
Hanton et al. (2012) explored the cognitive appraisals of organisational stressors.	Male and female sports performers from team and individual sports using a diary over a 6-week competition period.	3 high-order themes within primary appraisal (harm, threat and challenge), 3 within secondary appraisal (restricted resources, action to be taken, and had to hold back) and a reappraisal dimension. Generally, athletes appraised stressors as threating causing threat or harm and as having restricted resources or had to hold back.	Low sample size (n = 4) and lack of recognition of organisational stressor situational properties. Further use of the SAL in longitudinal research to include intensity measures for meaning, control and appraisal.

Hayward et al. (2017) identified adolescent swimmers, their mothers and coach's individual and shared stress experiences (stressors, appraisals and coping).	Daily dairies and 3 interviews over 6-week period leading to major competition.	Shared stress experiences between all members. They have the capacity to influence each other's stress experiences.	Future research to consider longer than a month time frame.
Kristiansen et al. (2012) explored coping strategies employed to manage organisational stressors.	4 US and 4 female pro soccer players were interviewed.	Most cited stressors were travel, drafting and contract, team issues, salaries, and coach issues.	Inclusion of a narrative could be seen as a parsimonious overview of the data.
Larner et al. (2017) examined relationships between organisational stressors and burnout in sport by focussing on the moderating role of surface acting and the impact these relationships have on turnover intentions.	Study 1: athletes and staff of various sports and performance levels completed OSI-SP, ELS, ABQ, CBQ and turnover intention. Study 2: athletes and staff of various sports and performance levels completed OSI-SP, ELS, turnover intention and actual turnover at time 1 and 6 months later.	Study 1: Surface acting increased burnout and turnover intention. Study 2: Stressor frequency and turnover was significant at higher levels of surface acting. Those with greater emotional labour express increased desire to leave their sporting organisation after 6 months yet do not leave. Importance of measuring organisational stressor dimensions and emotions.	Absence of multilevel analyses due to sports, levels and job roles. Modification of OSI-SP and ABQ for use in other populations. Future research to develop OSI-SP for other populations is warranted.
Levy et al. (2009) explored organisational stressors, coping and coping effectiveness.	One aquatic sports coach completed a diary over 28 days.	Identified administration, overload, competition environment, athletes and team atmosphere as over half of reported organisational stressors.	Limitations were generalisability of findings due to single participant sample from single sport, and failure to find high frequency reoccurring

		Only small numbers of stressors reoccurred over time.	stressors could be due to short period of time data were collected. Future research needs to consider a larger sample and over a longer period of time.
Neil et al. (2011) explored the interrelationships between stressors, appraisals, emotion responses and further appraisals.	Male and female, elite and non-elite, individual and team sport athletes were interviewed.	Revealed various demands differed in appraisals and emotions. Emotions were further appraised to be facilitative or debilitative to performance. It is athletes' cognitions and interpretations that can affect behaviour.	Since the research focused on competition stress, generalisations should be made tentatively to organisational stress and general behaviour and well-being. Future research should not examine a snapshot of time but a longer time period. Future research should also consider emotion intensity when investigating stress and emotion in sport.
Nicholls et al. (2005) identified stressors and coping strategies.	11 international male adolescent golfers used a checklist adapted from Anshel (1996) over 31-day competitive period.	Changes in frequencies coincided with related importance of golf competition.	Incomplete depiction of range of organisational stressors using a checklist No appraisals included. Future research to consider longer time frame.
Nicholls et al. (2010) explored the relationships between stress, emotion and coping.	10 male adolescent golfers were given definitions of stress components within the interviews. Stressors and coping strategies were analysed inductively, emotions and outcomes	Despite the outcomes, the most cited emotion was anxiety. Generally, favourable outcomes generated positive emotions and unfavourable outcomes generated negative emotions. However, negative emotions were	Research focused on competitive situations and generalisations should be made tentatively to organisational stress

	were analysed deductively into either Lazarus' (1999) emotions or one of the outcomes: favourable, unfavourable or neither.	generated at favourable outcomes and vice versa.	
Nicholls et al. (2011) investigated appraisals in relation to stressful encounters as being a loss or gain and the emotions generated in response.	10 elite rugby players were interviewed. Emotions deductively grouped into emotions recommended by Lazarus (1999).	Generally, loss generated negative and gain generated positive emotions, but do not assume relational meaning to particular stressors and appraisals.	Future research should gather subjective opinions of athletes as it will consider the different relational meaning through similar experiences.
Nicholls & Polman (2007) identified organisational stressors, coping and coping effectiveness.	11 English adolescent international rugby players. Stressors were identified using checklists in a diary over 31-day period	Most frequent cited stressors were making a physical error, receiving criticism, making a mental error, injury and observing an opponent play well.	Incomplete depiction of range of organisational stressors using checklists. No appraisals included. Longer timeframe needed.
Olusoga et al. (2009) gained in-depth accounts of stressors encountered by coaches.	Interviewed 12 UK coaches from a range of sports at a high international level.	Identified 10 high-order stressor themes.	Limitation was the transferability of findings to specific sports settings.
Olusoga et al. (2010) investigated responses and effects of stress alongside coping strategies.	UK world class coaches across different sports were interviewed.	Psychological, behavioural and physical responses to stress were found.	Limitation was retrospective interviews.
Pain & Harwood (2007) identified factors perceived to impact tournament performance of England youth football teams.	Players, coaches and support staff were interviewed	Revealed factors to positively and negatively influence performance. Eight performance environment dimensions were identified.	Limitations were that interviews were retrospective and with the research commissioned by the FA could taint responses to not criticise or to

			conform to the organisation.
Pain & Harwood (2008) developed a questionnaire from Pain and Harwood's (2007) dimensions to quantify the extent and magnitude of factors to impact performance.	Youth players and staff completed the PES at 6 tournaments over 2 years.	Team and social factors have the greatest positive impact whilst boredom and losing composure have a negative impact.	The PES was empirically grounded not theoretically driven. Validity and reliability of the PES has not been tested and it was developed from a small specialised sample. Future research in youth football should consider experiences from a large sample size.
Pain et al. (2012) facilitated systematic reflection and action to improve the performance environment.	Used an action research design to assist a university football coach manage their performance environment	Coach perceived PES to be beneficial in managing the environment e.g., improvement in team functioning.	Methodological application might not be feasible in elite football due to time constraints. Need to establish the validity and reliability of the PES and adapt it to club football.
Reeves et al. (2009) explored stressors and coping.	Early and middle adolescent football players in the Premier League were interviewed.	Mid-adolescents experienced more stressors than early adolescent players and both experience common and different stressors.	Definition of stress when interviewing could lead to restricted responses of participants. Future research should be aware of bias as a result of providing leading definitions.
Reeves et al. (2011) explored stressors, perceived control, coping and coping effectiveness.	Early and middle adolescent players in elite youth football completed diaries over four phases of a football season.	Subtle stressor differences, frequency fluctuated across season between groups.	Specific environments created by the academy structure and EPPP were not taken into consideration.

Thelwell et al. (2008) examined stressors experienced by elite level coaches.	10 coaches working with elite athletes from team and individual sports were interviewed.	Performance stressors included their own and their athletes' performance, and organisational stressors were leadership, personal, team and environmental issues.	Limitation was the transferability of findings to specific sport settings.
Thelwell et al. (2010) explored associations between stressors and coping strategies.	3 male professional team sport coaches were interviewed.	Coaches selected stressors to be performance and organisational related.	Limitation was retrospective interviews.
Wagstaff et al. (2018) explored whether stressor frequency encountered was related to burnout and if psychological resilience moderated the relationships between stressor frequency and burnout.	Similar participant demographics to Larner et al. (2017), who completed OSI-SP, ABQ, CBQ, CR-RISC-10.	Positive correlation between stressor frequency and athlete burnout. As psychological resilience increased in coaches, a weaker relationship between stressors and burnout was found. Stressor dimensions positively related to all dimensions of burnout for athletes and coaches.	Future research should employ longitudinal designs and utilise psychometrically robust inventories for coaches (OSI-SP was adapted for coaches).
Woodman & Hardy (2001) examined organisational demands encountered by sports performers.	Interviewed 15 athletes, content analysis.	Framework divided organisational issues into personal, leadership, team and environmental areas.	Conceptual origins of framework may pose subsequent bias toward group cohesion and interpersonal dynamics.

Appendix 2: Football club recruitment email Study 1

Department of Sport, Exercise and Rehabilitation,
Northumberland Building,
Northumbria University,
Newcastle Upon Tyne,
NE1 8ST.

May 2016

Dear ……..

I would like to let you know about a research study that we are conducting at Northumbria University which may be of interest to your football club. We are interested in exploring the performance environment within elite football academies since the introduction of the Premier League's Elite Player Performance Plan (EPPP). The aim is to identify what aspects of the football academy environment positively or negatively affects coach and player well-being. It is proposed understanding such information will enable academies to enhance their performance environment to become more effective in talent development. Since the introduction of the EPPP's aim to provide optimum environments to develop better home grown players; a lack of research has examined the influence of this new environment on coach and player well-being.

We are looking to recruit 4 full-time coaches with approximately 4 years work experience within an academy system and 4 players aged 12-16 years old. Both coaches and players will be in the youth development phase of the academy structure. Participants will attend one interview lasting roughly 30-45 minutes at a suitable time to fit in with academy timetabling. Interviews will be recorded and data collected will be treated confidentially.

At the end of the study, you will receive the generalised views of coaches and players, and what they perceive affects their well-being from working in a football academy environment. Findings could influence the management and support of coaches and players more effectively in order to further enhance an optimal working environment for talent development.

If your club would like to take part or requires additional information about this study, please contact: rachel.ade@northumbria.ac.uk

Thank you for considering this research opportunity.

Yours sincerely,

Rachel Ade
Postgraduate researcher

Appendix 3: Parent information letter Study 1

northumbria UNIVERSITY NEWCASTLE
Faculty of Health & Life Sciences

Northumberland Building,
Northumbria University,
Newcastle Upon Tyne,
NE1 8ST.

July 2016

Dear Parent or Guardian,

I am a PhD researcher based at Northumbria University in Newcastle upon Tyne and I am investigating football environments and their influence on well-being. I am conducting a study which aims to investigate your son's experiences of playing football in an academy and its influence on their well-being. The project will involve your son taking part in an interview held in a safe, private room at his football academy. The interview will take place at a time which does not conflict with training.

I am therefore writing to you to ask your permission for your son's participation. Full details are outlined in the information leaflets provided, one for yourself and the other for your child. Just to make you aware that all members of the research team have DBS clearance and that *[insert name]* Football Club has agreed to take part in this research project. If you have any questions or would like to discuss this issue further please do not hesitate to contact me on the details provided.

Only the research team will have access to your son's answers for the purpose of the project. Your decision whether or not to allow your son to take part in the study will not affect the services normally provided to your son by the football club.

If you are happy for your child to be involved, please return the informed consent form to *[insert name]* Football Club Academy, as soon as possible. The information provided by all players who have taken part in the project will be summarised and a general summary of findings will be made to all interested parties. At no point will any information be identified as your son's. Results will be posted to individual football clubs for distribution.

Should you have any questions, please email: rachel.ade@northumbria.ac.uk
Thank you for your cooperation with this matter.

Yours faithfully,

Rachel Ade
Researcher
Department of Sport, Exercise and Rehabilitation

Appendix 4: Player information leaflet Study 1

How will my information collected be used?

All the information collected for the project will be displayed as a general summary and written up for publication/presentation. If you would like a copy of the results please tick the space on the consent form.

Information will be destroyed 5 years following the end of the project.

How can I be sure this project is okay for me to take part in?

The Department of Sport, Exercise and Rehabilitation Ethics Committee at Northumbria University have approved this project.

Rachel Ade, who will be interviewing you, has an up-to-date enhanced check from the Disclosure and Barring Service.

We would find it extremely helpful if as many players as possible participate. But, if you decide you don't want to take part anymore, this is absolutely fine, tell the researcher and your information will be removed.

northumbria UNIVERSITY NEWCASTLE

Players' Perspectives of Elite Football Club Academy Environments (What affects your well-being?)

Information for players

If you have any questions, please contact:
melissa.fothergill@northumbria.ac.uk

What is this project about?

We would like to find out what you think affects your well-being (e.g. happiness, satisfaction) as a footballer player in an academy.

There is not a lot of research out there which looks at this, so we are looking for football players aged 13-16 years old who play at an English league football academy to take part.

What will I have to do?

- Answer questions in an interview about your experiences as a football player in an academy. (The questions are designed to not make you feel embarrassed.)

The interview will be……

- with a researcher in a safe, private room.
- fitted in around your training so you do not miss anything.
- last around 30-40 minutes. (Sitting down for that amount of time can be uncomfortable so you can take a break whenever you need to).
- be audio recorded.

How will my information be kept private?

Your name will not be recorded; instead a participant number will be given. Being recorded is nothing to worry about. We record your answers so we can type them up to make sure we get your full answers.

All information collected will be stored in accordance with the Data Protection Act. The recordings and consent forms will be stored in locked filing cabinets, typed up interviews will be stored on a password-protected computer on University premises.

Who can look at the information I provide?

Any information collected will only be available to the research team for use in the project. Please see the front page for email details.

Answers will not influence on any selection choices from the football club.

Appendix 5: Players' and parents' consent form Study 1

INFORMED CONSENT FORM

Project Title: The Demands of an Elite Academy Football Club Environment from a Player's Perspective

Principal Investigator: Rachel Ade

Part A to be completed by the participant

	please tick where applicable
I have carefully read and understood the Participant Information Sheet.	☐
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	☐
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	☐
I agree to take part in this study.	☐
I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution.	☐

Signature of participant..... Date.....……..

(NAME IN BLOCK LETTERS).....…….

Date of birth: ……..

Signature of researcher..... Date.....……..

(NAME IN BLOCK LETTERS).....RACHEL ADE.....…….

Please see reverse

Part B to be completed by the parent, guardian or in loco parentis by the football club

I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution. ☐

I have read and understood the accompanying letter and information sheet and give permission for my child to be included.

Signature..... Date.....……..

(NAME IN BLOCK LETTERS).....…….

Printed name of child……..

Relationship to the child...……..

Appendix 6: Players' interview guide Study 1

Interview Guide (Players)

First, I would like to thank you for taking part in this study. Anything mentioned in this interview will be kept a secret from everybody except the research team. Your answers will never be traced back to you.

The reason for this interview is to try and find out what factors by attending an elite football academy influences your well-being for example, your emotions, satisfaction, happiness, development. I will ask you a set of questions and I would like you to answer as honestly as possible. If you feel you would not like to answer the question, for whatever reason, then please just say so and we can move on. You also have the right to drop out of the interview at any time.

Are you ready to start?

Introductory questions:
Could you first tell me how old you are?
And how many years have you been at ……Football Club?
And how many years in total have you been a football player at a football academy?
What position do you play?
Could you tell me how you got started playing football?
Could you tell me about how you became a footballer for……Football Club?

Main body:
Can you describe a typical week for you as a player in a football club academy?
What sort of worries are you faced with?
How might your typical week vary across a season?
What worries stay the same across a season?
What new worries appear across a season?

What do you enjoy about being a player in an elite academy football club?
What do you find difficult about being a player in an elite academy football club?

What factors positively affect your performance in training?
What factors negatively affect your performance in training?
What factors positively affect your performance in a home match?
- In an away match?

What factors negatively affect your performance in a home match?
- In an away match?

How does being a footballer at an academy affect your life away from the club? (Probes: family, friends, school, teachers, interests)
-

Overall, what has your experience of being a player within a football academy been like?

<u>Players on coaches</u>
What factors do you think influence your coaches' well-being?
Why do you think so?
What factors do you think influence your coaches' performance?

Why do you think so?

(Prompts: How did that work? How did you feel about that? What effect did that have? Could you talk more about/expand on that for me please? Is there anything else you could tell me about …..?
Could I just make sure I have got that right? [Recapitulate the participant's response to the questions]).

Final section:
Are there any other relevant worries, that I have missed, you would like to talk about?

The interview is finished. Thank you for taking part.
Here is a debrief sheet detailing the nature and purpose of my study for you to read. Is there anything you would like to ask regarding this study? Please feel free to leave when you are ready.

Appendix 7: Players' debrief sheet Study 1

northumbria UNIVERSITY NEWCASTLE

Faculty of Health & Life Sciences

By telling me what you think affects your well-being in a football academy has helped me learn about the different pressures you face as a footballer. I will also compare the answers given from player's aged 12-14 with player's aged 15-16 to see the similarities and differences. Other people have found that older players experience more issues influencing their well-being – I want to see if this happens.

Remember, all of your answers will be kept private and can only be seen by the research team for the purpose of the project. Your name won't be on any of the information I type up for publication or present at a meeting. No one will be able to find out which bits you said. Within 5 years of finishing the project your information will be destroyed.

You can have your answers removed by emailing one of the research team below, no questions asked. Please do this within a month of your interview so the results have not already been published.

If you have agreed to receive the results, the researcher will send the club a summary to hand out within approximately 3 months.

Don't forget, if you have any questions or worries, please email:

rachel.ade@northumbria.ac.uk

Appendix 8: Parents' debrief sheet Study 1

Faculty of Health & Life Sciences

Northumberland Building,
Northumbria University,
Newcastle Upon Tyne,
NE1 8ST.

July 2016

Dear Parent or Guardian,

We would like to take this opportunity to thank you for allowing your son to take part in our research on exploring the football environment's influence on your son's well-being. Your child's contribution is invaluable in helping us to understand football players' views about what affects their well-being in a football academy.

The information provided by all children who have taken part in our research will be summarised and included in a PhD Thesis. The overall research findings might also be shared with others through publications and presentations relating to the study. However, your son's individual information will not be identifiable in any format.

On the completion of the study, Liverpool Football Club Academy will be sent a summary of the research findings. You will also receive a summary of the research findings if you requested one when you gave consent for your son to take part in the research.

If for any reason you would like to withdraw your son's contribution to this research, please contact Rachel Ade via email: rachel.ade@northumbria.ac.uk within one month of taking part. Furthermore, if you have any worries or complaints about the way in which this research has been conducted you can contact the Chair of the School Ethics Committee, Dr. Mick Wilkinson via email: mic.wilkinson@northumbria.ac.uk

Thank you once again.

Yours faithfully,

Rachel Ade
Researcher
Department of Sport, Exercise and Rehabilitation

Appendix 9: Coaches' information sheet Study 1

Faculty of Health & Life Sciences

PARTICIPANT INFORMATION SHEET

Project title: Coaches' Perspectives of Elite Football Club Academy Environments

INFORMATION TO POTENTIAL PARTICIPANTS

1. What is the purpose of the project?

The purpose of the study is to gain an insight into your views as a football coach on what influences your well-being (e.g., happiness, satisfaction) within academy setting. Research has mainly looked at athlete's opinions on this, but with the expansion of the coaches' role and ever increasing pressure, more attention is needed to examine the factors affecting coaches' well-being in football.

2. Why have I been selected to take part?

You are a full time coach within the youth development phase of academy football club. You have also worked within the academy system (either at your present club or previous clubs) for approximately 4 years.

3. What will I have to do?

You will attend one interview at your football academy and answer questions regarding your experiences as a coach in academy football. The interview will be with the researcher, audio recorded and last approximately 30-60 minutes.

4. Will my participation involve any physical discomfort?

Your participation will not involve any physical discomfort. However, sitting in one place for an extended period of time can be uncomfortable so you should take a break whenever you need to.

5. Will my participation involve any psychological discomfort or embarrassment? The interview questions are not predicted to be any way invasive or embarrassing, however you do not have to answer any questions you do not wish to.

6. How will confidentiality be assured?

You will be given a participant code that will always be used to identify any data that you provide. Your name or other personal details will not be associated with your data. All data will be stored in a locked filing cabinet or on a password-protected computer. Data will be treated in accordance with the Data Protection Act.

7. Who will have access to the information that I provide?

All information gathered will only be available to the research team identified below for the purpose of the study; at no point will your personal information or data be revealed.

8. How will my information be used in the future?

The data collected will be used for a PhD Thesis. It may also be published in scientific journals or presented at conferences. Should the research be presented or published in any form, then that information will be generalised (i.e. your personal information or data will not be identifiable). All data collected will be destroyed within 5 years following the conclusion of the study.

9. Has this investigation received appropriate ethical clearance?

Yes, by the Department of Sport, Exercise and Rehabilitation Ethics Committee.

10. How can I withdraw from the project?

You can withdraw from the study at any time during the interview. If you would like to withdraw after the interview then please email the researcher within one month of taking part quoting your participant number. If you email to be withdrawn from the study after 1 month then it may not be possible to remove you from the study.

11. If I require further information who should I contact and how?

If you have any further questions, like to register a complaint, or would like to withdraw from the study, then please contact Rachel Ade or Dr. Melissa Fothergill via email at rachel.ade@northumbria.ac.uk or melissa.fothergill@northumbria.ac.uk

Appendix 10: Coaches consent form Study 1

INFORMED CONSENT FORM

Project Title: Demands of Elite Academy Football Club Environments: Coaches' Perspectives

Principal Investigator: Rachel Ade

	please tick or initial where applicable
I have carefully read and understood the Participant Information Sheet.	☐
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	☐
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	☐
I agree to take part in this study.	☐
I would like to receive feedback on the overall results of the study at the email address given below. Email address……	☐

Signature of participant..... Date.....……..
(NAME IN BLOCK LETTERS).....…….
Date of birth: ……..
Signature of researcher..... Date.....……..
(NAME IN BLOCK LETTERS).....RACHEL ADE.....…….

Appendix 11: Coaches' interview guide Study 1

Interview Guide (Coaches)

After pilot study 1:

First, I would like to personally thank you for taking part in this study. This interview will be confidential and any personally identifiable information concerning your participation will not be disclosed at any stage of the research process.

The purpose of the interview is to try and find out what factors by working in an elite football academy influences your well-being e.g. happiness, satisfaction. I will ask you a set of questions and I would like you to answer as honestly as possible. If you feel you wouldn't like to answer the question, for whatever reason, then please just say so and we can move on. You also have the right to drop out of the interview at any time.

Are you ready to begin?

Introductory questions:
Could you first tell me how old you are?
What coaching qualifications do you hold?
Are you planning to take any further qualifications? Is this for your job role or for personal development?
And how many years have you worked at ……Football Club?
And how many years have you been a football coach overall?
Could you tell me how you got involved in coaching?
Could you tell me about how you became a coach for……Football Club?

Main body: We are going to move onto the main body of the interview…..

Coaches
Can you describe a typical week for you as a coach in a football academy?
What sort of challenges are you faced with in this typical week?
Could you tell me how your typical week can vary across a season?
What challenges stay the same across a season?
What challenges differ across a season?

Could you tell me about your roles and responsibilities as a coach in the youth development phase?
What are the positive aspects associated with your role?
What are the negative factors associated with your role?

Could you tell me about what you enjoy about being an academy coach?
Could you tell me about what you not find enjoyable about being an academy coach?

On a match day, could you tell me about what factors positively influence your performance as a coach?
On a match day, could you tell me about what factors negatively influence your performance as a coach?
During the other times at work i.e., not a match, could you tell me about what aspects positively influence your performance as a coach?
Now could you tell me about what aspects negatively influence your performance as a coach?

Could you tell me about how being a football coach fits in with your life? (Probes: family, friends, interests)
What aspects of coaching affect your life away from work?

Overall, what has your experience of being a coach within a football academy been like?

Now we are going to move onto talking about the EPPP…

Coaches' pre-EPPP
During your time as an academy football coach, as you know, the Elite Player Performance Plan has been introduced. I am going to ask you a few questions now about this….

Can you describe what being a coach was like before the introduction of the EPPP?
What sort of challenges were you faced with then?
What challenges have stayed the same?
What challenges have differed?

Could you tell me about how the introduction of the EPPP has changed your coaching roles and responsibilities?
What were the positive aspects associated with your role then?
What were the negative factors associated with your role then?

What aspects for you as a coach has the EPPP introduction been for the better?
How has this affected your coaching?
What aspects for you as a coach has the EPPP introduction been for the worse?
How has this affected your coaching?

How has the introduction of the EPPP influenced your life out of work? (Probes: family, friends, interests)
What has the impact been?
What challenges have resulted from the EPPP that affect your life?

Overall, what has your experience as a football coach since the introduction the EPPP been like?

Moving away from your life, we are going to briefly talk about the players….
Coaches on players
What factors do you think influence player's well-being in the youth development phase?
In the youth development phase what age group do you think is most affected by being a football player in an academy?
Why do you think so?

(Prompts: How did that work? How did you feel about that? What effect did that have? Could you talk more about/expand on that for me please? Is there anything else you could tell me about …..?
Could I just make sure I have got that right? [Recapitulate the participant's response to the questions]).

Final section:
Is there anything that we haven't talked about that you are able to tell me about your experience as a coach in a football academy? (Woodman & Hardy, 2001)

Are there any other relevant issues you which you think affects your well-being in an academy environment you would like to discuss?

The interview is finished. Thank you for taking part.
Here is a debrief sheet detailing the nature and purpose of my study for you to read. Is there anything you would like to ask regarding this study? Please feel free to leave when you are ready.

Appendix 12: Coaches' debrief sheet Study 1

Faculty of Health & Life Sciences

PARTICIPANT DEBRIEF SHEET

1. What was the purpose of the project?
The purpose of this study was to see what you think affects your well-being in an elite English football academy since the introduction of the Elite Player Performance Plan. It is expected that coaches will provide a range of factors affecting well-being but most will be specific to their role in the football.

2. How will I find out about the results?
If you have agreed to receive feedback on the consent form, the researcher will send the football club for distribution, a general summary of the study within approximately 3 months. If you previously declined and now would like to know the results of the study please contact the researcher.

3. What will happen to the information I have provided?
Data collected will be written up for a PhD Thesis. It may also be published in scientific journals or presented at conferences. Should the research be presented or published in any form, all data will be anonymous (i.e. your personal information or data will not be identifiable). Information and data gathered during this research study will only be available to the research team and stored in line with the Data Protection Act. Information and data will be destroyed within five years following the conclusion of the study. If the research is published in a scientific journal it may be kept for longer before being destroyed.

4. Have I been deceived in any way during the project?
No

5. If I change my mind and wish to withdraw the information I have provided, how do I do this?
If you wish to withdraw your data contact one of the research team (their contact details are provided below) within a month of your participation. After this date, it may not be possible as the results may already have been published.

If you have any worries about the way in which this research has been conducted, would like to withdraw from the study, or have not received agreed general feedback of the study, then please contact Rachel Ade or Dr. Melissa Fothergill via email at rachel.ade@northumbria.ac.uk or melissa.fothergill@northumbria.ac.uk

This study and its protocol have received full ethical approval from the Department of Sport, Exercise & Rehabilitation Ethics Committee in accordance with the Faculty of Health and Life Sciences Ethics Committee. If you require confirmation of this please contact the Chair of this Committee, Dr. Mick Wilkinson (mic.wilkinson@northumrbia.ac.uk), stating the title of the research project and the name of the researcher.

Appendix 13: Invitation letter for academies Study 2

northumbria UNIVERSITY NEWCASTLE

Faculty of Health & Life Sciences

Department of Sport, Exercise and Rehabilitation,
Northumberland Building,
Northumbria University,
Newcastle Upon Tyne,
NE1 8ST.

21st October 2016

Dear ,

We would like to let you know about a research study being conducted at Northumbria University which may be of interest to your football club. We are interested in exploring the football environment since the introduction of the EPPP and the experiences coaches and players face throughout a season in this environment. There is a lack of research which has examined the influence of the football environment created by the EPPP on coaches and players across a football season.

We are looking to recruit full-time coaches and players (under 14s, under 15s and under 16s) within the youth development phase of the academy structure. Participants will complete an individual diary booklet for one week three times during the 2016/2017 season. The diary will be completed at the end of each day following a training session at the academy.

You will receive up-to-date research data that details generalised views of coaches and players, and what positively and negatively occurs over a season, the cause, intensity and control over these situations. It may be possible that findings could influence the timely management and support of coaches and players more effectively in order to further enhance an optimal working performance environment.

If your club would like to take part or requires additional information about this study, please contact: rachel.ade@northumbria.ac.uk

Thank you for considering this research opportunity.

Yours sincerely,

Rachel Ade
Postgraduate researcher

Appendix 14: Parents' letter Study 2

Faculty of Health & Life Sciences

Northumberland Building,
Northumbria University,
Newcastle Upon Tyne,
NE1 8ST.

October 2016

Dear Parent or Guardian,

I am a PhD researcher based at Northumbria University in Newcastle upon Tyne investigating football environments and their influence on elite academy football players. I am conducting a study which aims to investigate your son's experiences of playing football in an academy over a season. The project will involve your son completing a seven-day diary three times within the 2016/2017 season. The diaries will be completed at the end of each day so it does not conflict with training or have any additional time implications.

I am therefore writing to you to ask your permission for your son's participation. Full details are outlined in the information leaflets provided, one for yourself and the other for your child. Just to make you aware that all members of the research team have a Disclosure and Barring Service clearance allowing us to work safely with children and that [*insert name*] Football Club have agreed to take part in this research project. If you have any questions or would like to discuss this issue further please do not hesitate to contact me on the details provided.

Only the research team will have access to your son's answers for the purpose of the project. Your decision whether or not to allow your son to take part in the study will not affect the services normally provided to your son by the football club.

If you are happy for your child to be involved, please return the informed consent form in the envelope provided to [*insert name*] Football Club Academy, as soon as possible. The information provided by all players who have taken part in the project will be summarised and be made available to all interested parties. At no point will any information be identified as your son's. The general, anonymised summary of the results will be posted to individual football clubs for distribution. It is hoped these findings will contribute to identifying the factors needed in creating an optimal working environment within football academies.

Should you have any questions, please email: rachel.ade@northumbria.ac.uk
Thank you for your cooperation with this matter.

Yours faithfully,

Rachel Ade
Researcher
Department of Sport, Exercise and Rehabilitation

Appendix 15: Players' and parents' consent form Study 2

northumbria UNIVERSITY NEWCASTLE
Faculty of Health & Life Sciences

INFORMED CONSENT FORM

Project Title: Players' Experiences of Elite Academy Football Environments across a Season

Principal Investigator: Rachel Ade

Part A to be completed by the participant

please tick where applicable

I have carefully read and understood the Participant Information Sheet.	☐
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	☐
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	☐
I agree to take part in this study.	☐
I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution.	☐

Signature of participant..... Date.....……..

(NAME IN BLOCK LETTERS).....…….

Date of birth: ……..

Signature of researcher..... Date.....……..

(NAME IN BLOCK LETTERS).....RACHEL ADE.....……

Please see reverse

Part B to be completed by the parent, guardian or in loco parentis by the football club

I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution. ☐

I have read and understood the accompanying letter and information sheet and give permission for my child to be included.

Signature..... Date.....……..

(NAME IN BLOCK LETTERS).....…….

Printed name of child……..

Relationship to the child..……..

Appendix 16: Parents' information sheet Study 2

How will the information collected from my son be used?

All the information collected for the project will be displayed as a general summary and written up for publication/presentation. If you would like a copy of the results please tick the space on the consent form.

Information will be destroyed 5 years following the end of the project.

How can I be sure this project is okay for my son to take part in?

The Department of Sport, Exercise and Rehabilitation Ethics Committee at Northumbria University have approved this project.

Rachel Ade, who distributing and collecting the diary booklets, has an up-to-date enhanced check from the Disclosure and Barring Service.

We would find it extremely helpful if as many players as possible participate. But, if you decide you don't want your son to take part anymore, this is absolutely fine, tell the researcher and his information will be removed.

THANK YOU

northumbria UNIVERSITY NEWCASTLE

Faculty of Health & Life Sciences

Players' Experiences of Elite Football

Club Academy Environments across a Season

Information for parents

If you have any questions, please contact: rachel.ade@northumbria.ac.uk
melissa.fothergill@northumbria.ac.uk

What is this project about?

We would like to find out the positive and negative experiences your son faces as a football player in an academy across a season.

There is not a lot of research out there which looks at this, so we are looking for football players aged 13-16 years old who play at an English league football academy to take part.

How will my son's information be kept private?

His name will <u>not</u> be recorded; instead a participant number will be given.

All information collected will be stored in accordance with the Data Protection Act . The recordings and consent forms will be stored in locked filing cabinets, typed up interviews will be stored on a password -protected computer on University premises.

What will my son have to do?

- Answer questions in a diary booklet about his experiences as a football player in an academy. (The questions are designed to <u>not</u> make him feel embarrassed)

The diary booklet will……

- consist of <u>only</u> seven daily diary sheets, one for each day of the week
- be distributed three times throughout the 2016/2017 season.
- be completed at the end of each day.
- take around 15 minutes each day to finish.

Who can look at the information my son provides?

Any information collected will <u>only</u> be available to the research team for use in the project. Please see the front page for email details.

Answers will <u>not</u> influence on any selection choices from the football club.

Appendix 17: Players information sheet Study 2

How will my information be used?

All the information collected for the project will be displayed as a general summary and written up for publication/presentation. If you would like a copy of the results please tick the space on the consent form.

Information will be destroyed 5 years following the end of the project.

How can I be sure this project is okay for me to take part in?

The Department of Sport, Exercise and Rehabilitation Ethics Committee at Northumbria University have approved this project.

Rachel Ade, who will be distributing and collecting the diary booklets, has an up-to-date enhanced check from the Disclosure and Barring Service allowing her to work with children.

We would find it extremely helpful if as many players as possible participate. But, if you decide you don't want to take part anymore, this is absolutely fine, tell the researcher and your information will be removed.

northumbria UNIVERSITY NEWCASTLE

Players' Experiences of Elite Football Club Academy Environments across a Season

Information for players

If you have any questions, please contact:
melissa.fothergill@northumbria.ac.uk

What is this project about?

We would like to find out what positive and negative experiences you come across as a football player in an academy throughout a season.

There is not a lot of research out there which looks at this, so we are looking for football players aged 13-16 years old who play at an English league football academy to take part.

What will I have to do?

- Answer questions in a diary booklet about your experiences as a football player in an academy. (The questions are designed to not make you feel embarrassed.)

The diary booklet will……

- consist of only seven daily diary sheets, one for each day of the week.
- be distributed three times in the 2016/2017 season.
- be completed at the end of each day.
- take around 15 minutes each day to finish.

How will my information be kept private?

Your name will not be identified; instead a participant number will be given.

All information collected will be stored in accordance with the law (Data Protection Act). The diary booklets and consent forms will be stored in locked filing cabinets, typed up open-ended responses will be stored on a password-protected computer on University premises.

Who can look at the information I provide?

Any information collected will only be available to the research team for use in the project. Please see the front page for email details.

Answers will not influence on any selection choices from the football club.

Appendix 18: Example of player diary for Study 2

northumbria UNIVERSITY NEWCASTLE
Faculty of Health & Life Sciences

Football Diary
1

Participant name……

Age……

Football position……

How many years at a football academy? ……

Introduction

This is a booklet to find out about what you experience throughout a week. It is not a test so there are no right or wrong answers. Please answer all the questions each day honestly and write down in detail everything you can remember.

What to do?

The first thing to do is fill in the front page of the diary. This information will be helpful in knowing the background of each person completing the diary.

You will be told a week to fill in this diary. Please complete each diary sheet at the end of that day e.g., fill in the Monday diary sheet after you have finished your day at the academy on a Monday. If you are not in the academy on one of the days then please fill in the diary at the end of your day.

At the end of the week, the diaries will be collected and be given to the researcher.

Familiarisation session

Creating the right environment is vital. There are many factors which can affect you as a footballer in the way you train, perform, develop and behave. This session is designed for you to think about possible factors which could influence you as footballer during your day.

1. As a player, what types of positive or negative situations might you have?

……

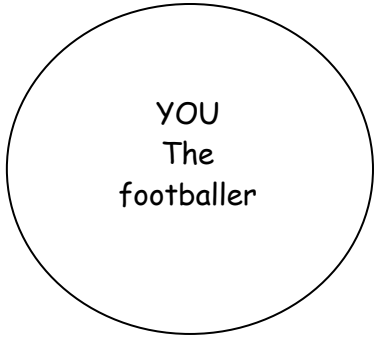
……

……

……

……

……



2. What or who do you think causes positive and negative situations to happen? What was the reason?

……

……

……

……

……

……

3. What types of feelings can result from positive and negative situations?

……

……

……

……

……

……

How to complete the diary?

Firstly, describe what you have done today. It may be that you went to school and trained afterwards, played a football match, only went to school or had a day off doing something. Write down what you did but in some detail e.g., Where? How long?

Thirdly, for the feeling you have written down in the previous box, please circle how strongly it felt, where 1 = not very strong to 5 = very strong.

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What caused this situation to happen? What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Secondly, (here is where the familiarisation session comes in handy!) * Describe in detail a situation where something positive or negative has happened to you in the day. Look at question 1 in the familiarisation session for some tips.
* Also, write down what you think caused each positive/negative situation to happen and how it made you feel at the time. See question 2 & 3 in the familiarisation session for help.

Lastly, please circle how in control of the situation you felt you were, where 1 = not in control to 5 = in total control.

Monday - Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Tuesday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Wednesday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Thursday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Friday – Date: ……

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Saturday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Sunday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Appendix 19: Coaches' information sheet (consideration of coaches)

Faculty of Health & Life Sciences

PARTICIPANT INFORMATION SHEET

Project title: Coaches' Experiences of Elite Football Club Academy Environments across a Season

INFORMATION TO POTENTIAL PARTICIPANTS

1. What is the purpose of the project?
The purpose of the study is to gain an insight into your experiences as a coach throughout a season within academy football. Research has mainly looked at athlete's experiences in sport over a period of time, but with the expansion of the coaches' role and ever increasing pressure, more attention is needed to examine the factors affecting coaches' in a football season. By identifying these factors and how they might change across a season may in providing better timely support and management to negative working experiences.

2. Why have I been selected to take part?
You are a full time coach within the youth development phase of academy football club and your club has agreed for you to be contacted.

3. What will I have to do?
You will be asked to complete a daily booklet consisting of seven daily diaries three times during the 2016/2017 season. You will answer the same set of questions on each day regarding your experiences as a coach in academy football.

4. Will my participation involve any physical discomfort?
No

5. Will my participation involve any psychological discomfort or embarrassment?
No

6. How will confidentiality be assured?
You will be given a participant code that will always be used to identify any data that you provide. Your name or other personal details will not be associated with your data. All data will be stored in a locked filing cabinet or on a password-protected computer. Data will be treated in accordance with the Data Protection Act.

7. Who will have access to the information that I provide?
All information gathered will be confidential and only available to the research team identified below for the purpose of the study.

8. How will my information be used in the future?
The data collected will be used for a PhD Thesis. It may also be published in scientific journals or presented at conferences. Should the research be presented or published in any

form, then that information will be generalised (i.e. your personal information or data will not be identifiable). All data collected will be destroyed within 5 years following the conclusion of the study.

9. Has this investigation received appropriate ethical clearance?
Yes, by the Department of Sport, Exercise and Rehabilitation Ethics Committee.

10. How can I withdraw from the project?
You can withdraw from the study at any time during the season. If you would like to withdraw then please email the researcher quoting your participant number. If you email to be withdrawn after May 2017, then it may not be possible to remove you from the study.

11. If I require further information who should I contact and how?
If you have any further questions, like to register a complaint, or would like to withdraw from the study, then please contact Rachel Ade or Dr. Melissa Fothergill via email at rachel.ade@northumbria.ac.uk or melissa.fothergill@northumbria.ac.uk

Appendix 20: Coaches' consent form (consideraton of coaches)

northumbria UNIVERSITY NEWCASTLE

Faculty of Health & Life Sciences

INFORMED CONSENT FORM

Project Title: Coaches' Experiences of Elite Football Academy Environments across a Season

Principal Investigator: Rachel Ade

	please tick or initial where applicable
I have carefully read and understood the Participant Information Sheet.	☐
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	☐
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	☐
I agree to take part in this study.	☐
I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution.	☐

Signature of participant..... Date.....……..

(NAME IN BLOCK LETTERS).....……

Date of birth: ……..

Signature of researcher..... Date.....……..

(NAME IN BLOCK LETTERS).....RACHEL ADE.....……

Appendix 21: Example of a coach's diary (consideration of coaches)

Faculty of Health & Life Sciences

Football Diary 1

Participant name……

Age……

How many years working at your current club? ……

How many years working overall within a football academy? ……

Introduction

This is a booklet to find out about what you experience throughout a week as a football coach. It is a diary so there are no correct or incorrect responses. Please answer all the questions each day honestly and write down in detail everything you can remember.

What to do?

The first thing to do is fill in the front page of the diary. This information will be helpful in knowing the background of each person completing the diary.

You will be told a week to fill in this diary. Please complete each diary sheet at the end of that day e.g., fill in the Monday diary sheet after you have finished your day at the academy on a Monday. If you are not in the academy on one of the days then please fill in the diary at the end of your day.

At the end of the week, the diaries will be collected and be given to the researcher.

Familiarisation session

Creating the right environment is vital. There are many factors which can affect you as a coach in the way you communicate, plan, perform and behave. This session is designed for you to think about possible factors which could influence you as coach during your day.

1. As a coach, what types of positive and negative situations might you have?

……

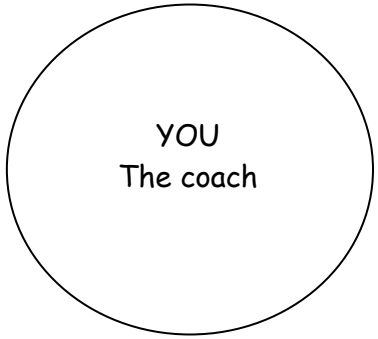
……

……

……

……

……



2. What or who do you think causes the positive and negative situations to happen? What was the reason?

……

……

……

……

……

3. What types of feelings can result from the positive and negative situations?

……

……

……

……

……

……

How to complete the diary?

Firstly, describe what you have done today. It may be that you had a paperwork day, had a lot of meetings to attend, only took training or had a day off doing something. Write down what you did but in some detail e.g., Where? How long?

Thirdly, for the feeling you have written down in the previous box, please circle how strongly it felt, where 1 = not very strong to 5 = very strong.

What did you do today?

Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What caused this situation to happen? (What was the reason for this situation to occur?)	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Secondly,
* Describe in detail a situation where something positive or negative has happened to you in the day. Look at question 1 in the familiarisation session for help.
* Write down what you think caused each positive/negative situation to happen and how it made you feel at the time. See question 2 & 3 in the familiarisation session for help.

Lastly, please circle how in control of the situation you felt you were, where 1 = not in control to 5 = in total control.

Monday - Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Tuesday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong … Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control … Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Wednesday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Thursday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong … Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control … Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Friday – Date: ……

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Saturday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Sunday – Date: ……..

What did you do today?				
Please describe in detail situations that happened to you today which were positive or negative. Write one situation in each box.	What was the reason?	How did each situation that happened make you feel at the time?	Rate how strong your feeling was to the situation, by circling a number. 1 2 3 4 5 Not strong Very strong	Rate how in control of the situation you think you were, by circling a number. 1 2 3 4 5 No control Total control
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5
			1 2 3 4 5	1 2 3 4 5

Appendix 22: Invitation letter to academies Study 3

Northumbria University
NEWCASTLE

Department of Sport, Exercise and Rehabilitation,
Northumberland Building,
Northumbria University,
Newcastle Upon Tyne,
NE1 8ST.

May 2018

Dear ……..

We would like to let you know about a research study being conducted at Northumbria University which may be of interest to your football club. We are interested in exploring the football environment since the introduction of the EPPP and the experiences players face throughout a season in this environment. There is a lack of research which has examined the influence of the football environment created by the EPPP on players' well-being and performance across a football season.

We are looking to recruit players (under 14s, under 15s and under 16s) within the youth development phase of the academy structure. Participants will complete a questionnaire booklet prior to the three fitness testing periods throughout the 2018/2019 season.

You will receive up-to-date research data that details the relationships between players' experiences within a football academy and their emotions, satisfaction, recovery and performance across a season. It may be possible that findings could influence the timely management and support of players more effectively in order to further enhance an optimal working performance environment.

If your club would like to take part or requires additional information about this study, please contact: rachel.ade@northumbria.ac.uk

Thank you for considering this research opportunity.

Yours sincerely,

Rachel Ade
Postgraduate researcher

Appendix 23: Players' information leaflet Study 3

How will my information be used?

All the information collected for the project will be displayed as a general summary and written up for publication/presentation. If you would like a copy of the results please tick the space on the consent form.

Information will be destroyed 5 years following the end of the project.

How can I be sure this project is okay for me to take part in?

The Department of Sport, Exercise and Rehabilitation Ethics Committee at Northumbria University have approved this project.

Rachel Ade, who will be distributing and collecting the questionnaire booklets, has an up-to-date enhanced check from the Disclosure and Barring Service allowing her to work with children.

We would find it extremely helpful if as many players as possible participate. But, if you decide you don't want to take part anymore, this is absolutely fine, tell the researcher and your information will be removed.

THANK YOU!

northumbria UNIVERSITY NEWCASTLE

Faculty of Health & Life Sciences

Football Academy Experiences, Well-being and Performance of Players across a Season

Information for players

If you have any questions, please contact:
rachel.ade@northumbria.ac.uk rick.hayman@northumbria.ac.uk

What is this project about?

We would like to find out if there are any relationships between your feelings, performance and experiences you come across as a football player in an academy throughout a season.

There is not a lot of research out there which looks at this, so we are looking for football players aged 13-16 years old who play at an English league football academy to take part.

What will I have to do?

- Perform your usual fitness tests for the club.
- Answer questions by circling numbers in a questionnaire booklet about your experiences as a football player in an academy. (The questions are designed to not make you feel embarrassed.)

The questionnaire booklet will……

- consist of only four questionnaires.
- be distributed three times in the 2018/2019 season.
- be completed before doing your fitness testing.
- take around 15 minutes to finish.

How will my information be kept private?

Your name will not be identified; instead a participant number will be given.

All information collected will be stored in accordance with the law (Data Protection Act). The questionnaire booklets and consent forms will be stored in locked filing cabinets, the fitness testing data will be stored on a password protected computer on University premises.

Who can look at the information I provide?

Any information collected will only be available to the research team for use in the project. Please see the front page for email details.

Answers will not influence on any selection choices from the football club.

Appendix 24: Parents' information leaflet Study 3

How will the information collected from my son be used?

All the information collected for the project will be displayed as a general summary and written up for publication/presentation. If you would like a copy of the results please tick the space on the consent form.

Information will be destroyed 5 years following the end of the project.

How can I be sure this project is okay for my son to take part in?

The Department of Sport, Exercise and Rehabilitation Ethics Committee at Northumbria University have approved this project.

Rachel Ade, who distributing and collecting the questionnaire booklets, has an up-to-date enhanced check from the Disclosure and Barring Service.

We would find it extremely helpful if as many players as possible participate. But, if you decide you didn't want your son to take part anymore, this is absolutely fine, tell the researcher and his information will be removed.

THANK YOU

northumbria UNIVERSITY NEWCASTLE

Faculty of Health & Life Sciences

Football Academy Experiences, Well-being and Performance of Players across a Season

Information for parents

If you have any questions, please contact:
rachel.ade@northumbria.ac.uk rick.hayman@northumbria.ac.uk

What is this project about?

We would like to find out if there are any relationships between your son's feelings, performance and experiences he faces as a football player in an academy across a season.

There is not a lot of research out there which looks at this, so we are looking for football players aged 13-16 years old who play at an English league football academy to take part.

How will my son's information be kept private?

His name will not be recorded; instead a participant number will be given.

All information collected will be stored in accordance with the Data Protection Act. The questionnaire booklets and consent forms will be stored in locked filing cabinets, the fitness testing data will be stored on a password-protected computer on University premises.

What will my son have to do?

- Carry out his usual fitness testing with the club.
- Answer questions by circling numbers in a questionnaire booklet about his experiences as a football player in an academy. (The questions are designed to not make him feel embarrassed.)

The questionnaire booklet will……

- consist of only four questionnaires.
- be distributed three times throughout the 2018/2019 season.
- be completed before the fitness testing.
- take around 15 minutes to finish.

Who can look at the information my son provides?

Any information collected will only be available to the research team for use in the project. Please see the front page for email details.

Answers will not influence on any selection choices from the football club.

Appendix 25: Players' and parents' consent form Study 3

Northumbria University
NEWCASTLE
Faculty of Health & Life Sciences

INFORMED CONSENT FORM

Project Title: Players' Experiences, Well-being and Performance within Elite Academy Football Environments across a Season

Principal Investigator: Rachel Ade

Part A to be completed by the participant

I have carefully read and understood the Participant Information Sheet.	☐
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	☐
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	☐
I agree to take part in this study.	☐
I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution.	☐

Signature of participant..... Date.....……..

(NAME IN BLOCK LETTERS).....…….

Date of birth: ……..

Signature of researcher..... Date.....……..

(NAME IN BLOCK LETTERS).....RACHEL ADE.....…….

Please see reverse

Part B to be completed by the parent, guardian or in loco parentis by the football club

I would like to receive feedback on the overall results of the study. The investigator will post the generic results directly to the football club for distribution. ☐

I have read and understood the accompanying letter and information sheet and give permission for my child to be included.

Signature..... Date.....……..

(NAME IN BLOCK LETTERS).....…….

Printed name of child……..

Relationship to the child...……..

Appendix 26: Questionnaire booklet Study 3

Northumbria University
NEWCASTLE

Questionnaire Booklet

Participant name……

Age……

Football position……

SPORT EMOTION QUESTIONNAIRE

Below you will find a list of words that describe a range of feelings that sport performers may experience. Please read each one carefully and indicate on the scale next to each item how you feel **right now, at this moment**. There are no right or wrong answers.

	Not at all	A little	Moderately	Quite a bit	Extremely
Uneasy	0	1	2	3	4
Upset	0	1	2	3	4
Exhilarated	0	1	2	3	4
Irritated	0	1	2	3	4
Pleased	0	1	2	3	4
Tense	0	1	2	3	4
Sad	0	1	2	3	4
Excited	0	1	2	3	4
Furious	0	1	2	3	4
Joyful	0	1	2	3	4
Nervous	0	1	2	3	4
Unhappy	0	1	2	3	4
Enthusiastic	0	1	2	3	4
Annoyed	0	1	2	3	4
Cheerful	0	1	2	3	4
Apprehensive	0	1	2	3	4
Disappointed	0	1	2	3	4
Angry	0	1	2	3	4
Energetic	0	1	2	3	4
Happy	0	1	2	3	4
Anxious	0	1	2	3	4
Dejected	0	1	2	3	4

RECOVERY STRESS QUESTIONNAIRE

This questionnaire consists of a series of statements which possibly describe your psychological/physical wellbeing or your activities during the past few days/ nights. The statements related to performance should refer to performance during competition and practice. Please make your selection by ticking the box corresponding to the appropriate answer (that reflects your thoughts and activities). Please do not leave any statements blank. If you are unsure which answer to choose, select the one that most closely applies to you.

Example: In the past (3) days/nights

…I read a newspaper

0	1	2	3	4	5	6
never	seldom	sometimes	often	more often	very often	always

In the past 3 days/nights:	0	1	2	3	4	5	6
1….I watched TV							
2. …I laughed							
3. …I was in a bad mood							
4. …I felt physically relaxed							
5. …I was in good spirits							
6. …I had difficulties in concentrating							
7. …I worried about unresolved problems							
8. …I had a good times with my friends							
9. …I had a headache							
10. …I was dead tired after work							
11. …I was successful in what I did							
12. …I felt uncomfortable							
13. …I was annoyed by others							
14. …I felt down							
15. …I had a satisfying sleep							
16. …I was fed up with everything							
17. …I was in a good mood							
18. …I was overtired							
19. …I slept restlessly							
20. …I was annoyed							
21. …I felt as though I could get everything done							
22. …I was upset							
23. …I put off making decisions							
24. …I made important decisions							
25. …I felt under pressure							
26. …parts of my body were aching							
27. …I could not get rest during the breaks							

0: never **1: seldom** **2: sometimes** **3: often** **4: more often** **5: very often** **6: always**

In the past 3 days/nights:	0	1	2	3	4	5	6
28. …I was convinced I could achieve my set goals during performance							
29. …I recovered well physically							
30. …I felt burned out by my sport							
31. …I accomplished many worthwhile things in my sport							
32. …I prepared myself mentally for performance							
33. …my muscles felt stiff or tense during performance							
34. …I had the impression there were too few breaks							
35. …I was convinced I could achieve my performance at any time							
36. …I dealt effectively with my team-mates' problems							
37. …I was in good condition physically							
38. …I pushed myself during performance							
39. …I felt emotionally drained from performance							
40. …I had muscle pain after performance							
41. …I was convinced that I performed well							
42. …too much was demanded of me during breaks							
43. …I psyched myself up before performance							
44. …I felt I wanted to quit my sport							
45. …I felt very energetic							
46. …I easily understand how my team mates felt about things							
47. …I was convinced that I trained well							
48. …the breaks were not right at times							
49. …I felt vulnerable to injuries							
50. …I set definite goals for myself during performance							
51. …my body felt strong							
52. …I felt frustrated by my sport							
53. …I dealt with emotional problems in my sport very calmly							

0:never **1:seldom** **2:sometimes** **3:often** **4:more often** **5:very often** **6:always**

Each of the following questions describes pressures that you may have experienced as part of your participation in competitive sport in the past month. Pressure is:

Those events, situations, or conditions that place a demand on you

For each question, place a tick in each of the three columns to indicate:

- **how often this pressure placed a demand on you ("Frequency" column),**
- **how demanding this pressure was for you ("Intensity" column), and**
- **how long this pressure placed a demand on you for ("Duration" column)**

In the past month, I have experienced pressure associated with…		FREQUENCY						INTENSITY						DURATION					
		How often did this pressure place a demand on you?						How demanding was this pressure?						How long did this pressure place a demand on you for?					
		Never	Rarely	Sometimes	Often	Very often	Always	No demand	Very low	Low	Moderate	High	Very high	No time	A very short time	A short time	A medium amount of time	A long time	A very long time
		0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
1	…the responsibilities that I have on my team																		
2	…the relationship between my coach and I																		
3	…the regulations in my sport																		
4	…my coach's personality																		
5	…the accommodation used for training or competitions																		
6	…the training or competition venue																		

In the past month, I have experienced pressure associated with…		FREQUENCY						INTENSITY						DURATION					
		How often did this pressure place a demand on you?						How demanding was this pressure?						How long did this pressure place a demand on you for?					
		Never	Rarely	Sometimes	Often	Very often	Always	No demand	Very low	Low	Moderate	High	Very high	No time	A very short time	A short time	A medium amount of time	A long time	A very long time
		0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
7	…the organization that governs and controls my sport																		
8	…the atmosphere surrounding my team																		
9	…how my team is selected																		
10	…my teammates' attitudes																		
11	…the spectators that watch me perform																		
12	…the food that I eat																		
13	…the shared beliefs of my teammates																		
14	…what gets said or written about me in the media																		
15	…selection of my team for competition																		

	In the past month, I have experienced pressure associated with…	FREQUENCY How often did this pressure place a demand on you?						INTENSITY How demanding was this pressure?						DURATION How long did this pressure place a demand on you for?					
		Never	Rarely	Sometimes	Often	Very often	Always	No demand	Very low	Low	Moderate	High	Very high	No time	A very short time	A short time	A medium amount of time	A long time	A very long time
		0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
16	…my training schedule																		
17	…the organization of the competitions that I perform in																		
18	…injuries																		
19	…the funding allocations in my sport																		
20	…the development of my sporting career																		
21	…the technology used in my sport																		
22	…travelling to or from training or competitions																		
23	…my goals																		

THANK YOU

Glossary

Adolescence: “Consistent with development psychologists, athletes aged between 12 to 21 years were classified as being adolescent in this thesis.” Nicholls (2005).

Emotion is “an organised psycho-physiological reaction to ongoing relationships with the environment, most often, but not always, interpersonal or social” (Lazarus, 2000, p.230).

Home grown player according to UEFA (2011) is a first team player who trained for at least three years with his club between the ages of 15 and 21.

Organisation stress is “an ongoing transaction between an individual and the environmental demands associated primarily and directly with the organisation within which he or she is operating” (Fletcher et al., 2006, p.329).

Organisational stressors are “environmental demands (i.e., stimuli) associated primarily and directly with the organisation within which an individual is operating” (Fletcher et al., 2006, p.329).

Organisational strain is “an individual’s negative psychological, physical and behavioural responses to organisational stressors” (Fletcher et al., 2006, p.329).

Performance environment is “the array of factors impacting individual and team performance in competitive situations. It includes only those factors that are temporally and organisationally related to the competitive situation (i.e., micro-level influences). This means that historical events relating to players or the team, and socio-economic influences originating from the external environment are both excluded (i.e., macro-level influences)” (Pain & Harwood, 2008, p.1158).

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