Exploring the reflective practice of a multidisciplinary team within an elite English football academy.

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<u>Abstract</u>

Reflective practice is defined as the process of learning through and from experience towards gaining new insights of self and/or practice (Boud et al., 1985). It has become an essential characteristic of professional competence and, as such, has been identified as a vital aspect of coach education. Nevertheless, reflections on coach education programmes are often carried out in rational environments; decontextualised learning environments which fail to replicate the often-complex nature of the day-today experiences of coaches in the field. It has been suggested that whilst coaches may think they are reflecting, often they are confused between what reflection is and other mental processes (e.g., pondering, scrutinising, and ruminating). Research on reflective practice has yet to articulate 'how' it is implemented or experienced by coaches, and in what ways do clubs initiate, sustain, nurture and influence this process through reflective activities within the real-world context. Using Moon's (1999) Model of Reflection, this research intends to explore how reflective practice is being perceived and applied within an elite English football academy setting. Specifically, it aims to investigate how key staff, working as part of a multidisciplinary team (MDT), interpret and implement The FA's Plan-Do-Review model. Furthermore, how do academies mobilise reflective practice according to the values and unique cultural environment of the Club under the auspices of the Premier League's Elite Player Performance Plan (EPPP).

Twelve members of an Academy Management Team (AMT) underwent a semistructured interview to examine the relationship between reflective practice and workplace culture. A semi-structured interview guide was used to aid the researcher to gain a better insight into the participants' perspective of reflective practice. Themes identified were organised into a hierarchical thematic structure. Initial results expose common pitfalls around the transfer of reflective skills learned through educational programmes and their application to real-world settings. Findings indicate that 1) There is a disconnect between the understanding and learning of reflective practice through coach education courses and its application within the real world. 2) Reflective practice should be nurtured and developed through strong networks and interprofessional collaboration, utilising communities of practice and mentoring relationships both in and outside the work environment. 3) The different disciplines working within an MDT will engage in reflection to varying depths and levels. Rather than viewing reflection on a

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hierarchical scale, the level and method of reflection should be determined by the individual, their experiences, and the context. Not all incidents require in-depth reflections, but support should be provided to practitioners to enable them to effectively assess how and when to move between different depths of reflection as appropriate. This work will impact upon the existing practices of football academies, enabling them to utilise reflective practice more effectively. For instance, a greater understanding of individual difference is recommended to help practitioners explore their decisions and experiences through appropriate strategies, thereby increasing their understanding and management of themselves, their practice, and ultimately the players within their care. This has implications for future coach education content.

Statement of Originality

I hereby certify that I am the sole author of this thesis entitled "Exploring the reflective practice of a multidisciplinary team within an elite English football academy", and that no part has previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Bournemouth University. I also certify that it has not been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices.

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Chapter 1 – Introduction

1.1 Background

Reflective practice is defined as the process of learning through and from experience towards gaining new insights of self and/or practice (Boud et al., 1985). It has been around as a buzz word in education since around the late 1990's (Moon, 2013). Before that it was being used mainly in nursing and social work (Quinn, 2000). Since then it has infiltrated most disciplines in education and professional development. The emergence of 'new professions' and specifically the increased professionalisation of sports coaching is one such example (Knowles et al., 2005). Its importance is frequently noted in the literature; indeed, it has come to be regarded as an essential characteristic of professional competence and a vital aspect of coach education. Reflections in many coach education programmes however are often carried out in rational environments; formalised learning venues which fail to replicate the often chaotic, complex and unpredictable nature of the coaching environment, and the dayto-day learning experiences of coaches in the field (Werthner and Trudel, 2006). The key factors that influence the context within which a club or academy operates for example, can also have a significant influence on the reflections of its coaches and their ability to reflect. Contextual factors should therefore be accounted for in the educational approaches to reflective learning (Koole et al., 2011). Cushion, Armour and Jones (2003) state that coach education programmes should include supervised field experiences in a variety of contexts, enabling coaches to consider differences, make mistakes, reflect and learn from them, and try again.

Coaching, however, lacks a critical tradition (Kirk & Tinning, 1990) and coaches are more likely to be seen sticking with 'safer', 'tried and tested', traditional methods (Harvey et al., 2010). Historically, this has made the adoption of such practice fraught with difficulties and resistance, with coaches staying within their 'comfort zone' rather than opening themselves up to self-reflection. As such, there is a lack of clarity regarding reflective practice within sports coaching due to its infancy. Furthermore, a review of practitioner literature finds little to help coaches understand how reflection actually works. Scanlan and Chernomas (1997) for example indicated that, whilst coaches may think they are reflecting, often they are confused between what reflection is and other mental processes (e.g., pondering, scrutinising, ruminating). Reflection is

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an active, persistent, and careful process. According to Treynor et al. (2003, p. 256), reflection refers to the deliberate and "purposeful turning inward of one's attention in order to engage in cognitive, goal-directed problem solving", the aim of which is to increase performance beyond its current level. Its function, therefore, is to transform a situation in which there may be obscurity, doubt, conflict or disturbance of some sort into a situation that is clear, coherent, settled and harmonious (Dewey, 1933). This can be an uncomfortable process, one which requires a great deal of time, honesty, focus, commitment, energy and willingness. However, whilst it may start with discomfort, it can lead to clarity of thought and a balanced state, "giving an individual an increased power of control" (Dewey, 1933, p.21).

By contrast, ruminative thinking involves a passive, repetitive and prolonged focus on past or present events. It is often self-referential, meaning that it is focused on one's self and one's world, rather than being goal-directed (Segerstrom et al., 2003). Rumination can therefore be thought of as a highly constrained form of mind-wandering (Christoff et al., 2016); a low-level cognitive process in which one thought leads to another but rarely to a solution or a conclusion. As such, it is often problem-pondering rather than problem-solving. This can both help and hinder performance. For example, in undemanding contexts, mind-wandering can serve as a useful function for creativity (Baird et al., 2012) and planning (Baird, Smallwood, & Schooler, 2011). On the other hand, it can disrupt performance when it takes away cognitive resources that are needed to perform the task, and this occurs in particular when mind-wandering is unintentional and uncontrolled (Ottaviani et al., 2015; Seli et al., 2016), as is the case with rumination.

This lack of conceptual clarity is supported by Totterdell and Lambert (1999) who question whether practitioners really understand the true nature of reflective practice. The issue may be compounded further by the paucity of empirical literature that examines the domain specific issues (e.g. impact, processes and definitions of reflection) of reflective practice currently available in the field (Cropley et al., 2012; Huntley et al., 2014). Thus far, research on reflective practice has yet to articulate 'how' it is implemented or experienced by coaches, and in what way do clubs initiate, sustain, nurture and influence this process through reflective activities within the real-world context.

1.2 Current Coach Education Provision

The English Football Association (The FA) Level 2 is an introductory course that is designed to provide coaches with information and practical examples of how best to coach players, providing a basic foundation of coaching practice for those who wish to progress along The FA Coaching Pathway. The course focuses on developing a broad base of declarative knowledge, primarily the techniques and tactics of the sport rather than procedural knowledge such as the development of effective reflective skills to inform ongoing experience to the benefit of future actions (Schön, 1983). Gagné et al. (1993, p.60) define declarative knowledge as "knowing that something is the case", namely, "knowledge of facts, theories, events, and objects", whereas procedural knowledge is "knowing how to do something which includes motor skills, cognitive skills and cognitive strategies". According to Metzler (2000), declarative knowledge is a 'prerequisite' for procedural knowledge; a coach must therefore have a basic knowledge of the sport before they can attempt to function in a more abstract or intuitive manner. However, whilst declarative knowledge is an essential foundation, procedural knowledge is important in its own right. All coaches need to have a deep and flexible knowledge of a variety of coaching methods and practices, along with an ability to make critical judgments about which are appropriate for use in particular situations (Star, 2005).

1.3 Rationale

My initial research idea for the thesis was derived from two key driving factors. Firstly, having played youth then senior club level football for more than a decade, I embarked on my coaching journey in 2003, enrolling on to The FA Level 2 in Coaching Football whilst studying a Coach Education and Sports Development undergraduate degree at Bath University. As a result of my early experiences of coach education, throughout my formative years as a coach, I was more disposed to prioritising short-term acquisition of high-level knowledge about the game, whilst my ability to reflect upon and apply changes to my performance was often inadequate, blinkering me from noticing valuable information which may have enabled me to garner an increased awareness from different vantage points (Brookfield 1995). I was therefore only applying a low or superficial level of reflection, described in Moon's (1999) model of reflection as "surface learning".

Secondly, whilst reflection is now advocated by coach education programmes around the world as a framework for coaches to learn from their experience (Callary et al., 2013), there is a paucity of empirical and critical work focussed on coaches' experiences of reflective practice. Much of the existing research has tended to examine applying 'reflection' to particular practices (e.g. Gilbert & Trudel, 2001; Knowles et al., 2001, 2006; Taylor et al., 2015; Trudel, Culver, & Werthner, 2013) rather than the actual impact on practice (Cushion et al., 2010), coaching knowledge and experience (Nelson and Cushion, 2006). Consequently, we lack understanding as to the utility of reflection in the messy realities of practice, and of what is meaningful to those who engage in such a personally involving, emotive and challenging process (Hall & Gray, 2016).

Finally, since the introduction of the Charter for Quality in 1998, the process of developing players has become an increasingly complex one. The plan, produced by The Football Association, sought to establish a two-tier youth programme in professional clubs consisting of Academies and Centres of Excellences. This intended to address a drop in standards within youth development, enhancing the quality and scope of clubs' long-term holistic development approaches. In order for clubs to attain Academy status, they were required to comprehensively enhance the quality of their provision, investing more time and money into the development of their young players. This includes an array of support services from a wide range of experts, as well as several statutory and regulatory requirements (including extended education provision, sports science and medical services, player recruitment responsibilities, careers services and safeguarding legislation), all of which serve to enhance and protect the experience of players. Careful coordination and integration of these services has become more complex over time, particularly since the launch of The Elite Player Performance Plan (EPPP) in 2012. The scheme, initiated and overseen by the Premier League, further categorises Academies from Category One (optimal) to Category Three (entry level). There is also a fourth Category that only operates teams between the ages of U17 to U21, providing a late development model.

Like other human service industries, the development of multidisciplinary support teams has been adopted within these academies in recognition of the need to centre each player's progression as a footballer at the heart of their operations. A multidisciplinary team, or MDT, is a diverse group of professionals working collaboratively in order to coordinate their efforts and deliver person-centred support. Since the Calman-Hine Report (1995), MDTs have widely been used in all parts of the National Health Service (NHS) to provide patients with personalised care and support in order to meet their physical, practical, emotional and social needs. Since the introduction of the EPPP, elite football academies now employ a wide range of professionals from a number of disciplines, which, along with a greater recognition of the need for a more holistic ecological approach to player development (Ryom et al., 2020), has seen MDT working endorsed as one of the main mechanisms to ensure holistic learning and development support. This has the potential to improve athlete health and performance by integrating different professional perspectives, ensuring that all the services and support functions serve to uphold the primary purpose of the academy. While the potential for comprehensive athlete servicing is obvious, the potential for working at cross-purposes could create conflicts due to competition for resources, task interdependence, jurisdictional ambiguity, and communication barriers (Reid, Stewart & Thorne, 2004). Further challenges for MDT's relate to attendance and availability for meetings, and the quality of data available to inform decision making (Commission for Health Improvement, 2001). In order to describe how these challenges might be overcome, the study aims to explore the working practices and context of an elite English football academy's MDT, a subject for which there is a paucity of research within the existing literature.

1.4 Aims and Objectives

1.4.1 Aims

 This study set out to examine the extent to which a team of multidisciplinary practitioners within an elite English football academy actively engage in critical reflection as part of their everyday practice.

1.4.2 Objectives

- To identify how organisational culture and other internal and external contextual factors may influence individual and group behaviour and attitudes towards reflective practice.
- Assess both the type and level of reflection that practitioners engage in using a critical incident analysis task.

- Explore the barriers and ascertain what support and changes may be required to promote the embeddedness of reflective practice within an elite English football academy.
- Qualitatively investigate current multidisciplinary team (MDT) practices using semistructured interviews.
- Provide recommendations for future MDT implementation within an elite English football academy environment.

Chapter 2 – Literature Review

2.1 Introduction

Consideration of prior, relevant literature is essential for all research disciplines and all research projects. It provides an overview of current knowledge, identifying relevant theories, methods, and gaps in the existing research.

Nearly a century ago, John Dewey (1933) articulated his concept of how we think in a book by the same name. He distinguished between four different modes of thinking: imagination, belief, stream of consciousness, and reflection. The mode he was most interested in was reflection as, unlike the other modes, it has the potential to contribute to lifelong learning. Dewey defines reflection as the

...active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends. (1933, p.9).

Although his work is frequently cited, the details of his concept of reflection are still not familiar (Rogers, 2002). Scholars of Dewey tend to be philosophers rather than practitioners, suggesting that practitioners (i.e., coaches and coach educators) may not refer to this literature in constructing their own approaches. However, Dewey's work serves as a foundation piece of literature when discussing experiential learning, of which reflection is a key tenant.

A direct descendant of Dewey's foundational theories is David Kolb's (1984) structure of experiential learning. His model (Figure 1) illustrates four stages of learning from experience: concrete experience, reflective observation, abstract conceptualisation, and active experimentation.



Figure 1. Experiential Learning Cycle (Kolb, 1984)

This simplistic four stage model illustrates learning as a dynamic, perpetual process, driven by reflection which leads to action. Without reflection, the learner is "stuck" in the experience without gaining any new understanding.

Based on Dewey's model and inspired partly by Kolb's Learning Cycle, Graham Gibbs (1988) produced a six stage Reflective Cycle (Figure 2), considering the importance of emotion and feeling as part of reflective practice. Gibbs believed that feelings and emotions significantly influence actions, therefore understanding self is key to reflective practice. He also explicitly addressed the need for conclusions and action plans.



Figure 2. Gibbs Reflective Cycle (Gibbs, 1988)

Unlike the single-loop learning models of Kolb and Gibbs, Donald Schön (1991), whose work was also developed from Dewey's theory, introduced the concept of 'double-loop' learning. Double-loop learning is focused upon improving the problem-solving capabilities of people who are involved in solving complex and ill-structured problems. This makes double-loop learning especially desirable within the context of coaching, where practitioners are typically expected to solve problems that operate within these boundaries. Schön was also interested in how and when professionals use reflection to build professional knowledge and expertise, from which he created a two-stage theory: reflection-in-action and reflection-on-action. Reflection-in-action means thinking about the action whist performing the task or procedure and actively amending one's action accordingly. Whilst reflection-on-action is concerned with examining the experience in greater detail after it has happened, finding alternative ways to do something to achieve the best possible outcome (Jasper, 2013).



Figure 3. Illustration of single and double loop learning adapted from Argyris and Schon (1978)

There have since been many models developed to help guide reflection (e.g. Driscoll, 1994; Atkins and Murphy, 1994; Bain et al., 1999; Moon, 1999; 2000; Johns 2000, Justice et al., 2007; Jasper, 2013), from more simplistic ones for 'novices' who are trying to break down and evaluate a specific situation, to the more complex ones that build on the basics and hope to elicit a change in one's personal beliefs and challenge assumptions. While some are explicitly called 'models of reflection', others are more generally called 'models of learning'. Each model has many common themes and the depth of reflection is often represented in a hierarchy of 'levels', implying that reflection is, in some way, hierarchical or proceeded in a sequence of stages from less to more complex. This assumes that the benefits that can be attained accumulate as one climbs the 'ladder' or ascends the hierarchy. 'Mastery' at one level is therefore considered a prerequisite for moving onto the next level. The following statement by Mezirow (1990: p1) summarises this process:

To make "meaning" means to make sense of an experience; we make an interpretation of it. When we subsequently use this interpretation to guide decision-making or action, then making "meaning" becomes "learning". Reflection enables us to correct distortions in our beliefs and errors in

problem-solving. Critical reflection involves a critique of the presuppositions on which our beliefs have been built. Transformative learning may be defined as "the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action".

Whilst the number of levels may differ between models, they are generally consistent in viewing superficial levels of reflection as descriptive, whereas deeper levels of reflection are characterised by perspective transformation (Mezirow, 1991, 1998), transformatory critique (Barnett, 1997), or transformative learning (Moon, 1999). Van Manen (1977) also sees reflection as a hierarchical scale organised into three levels, suggesting that if practitioners were to be truly reflective, they would have to operate at a technical (e.g., developing the mechanical aspects of practice), practical (e.g., understanding personal meaning within a situation), and critical (e.g., challenging habitual practices) level. Bennett and Bennett (2008) refer to these levels in terms of Surface (an awareness that requires minimal understanding or action), Shallow (an understanding that involves meaning and sense-making), and Deep (an understanding and meaning that is integrated, analysing the detail and context of the experience which often leads to action or a possible solution). This is consistent with Schön's (1983) 'technical rationality', and Valli's (1997) 'technical reflection', which are not considered to be intellectual in nature, whereas being critically self-aware is an acquired skill that comes with experience and intellect. Whilst technical and practical knowledge is considered to be essential to human practice, it is of limited value in achieving transformative learning. Mezirow's (2009) theory gives a central role to critical reflection in the process of transformative learning as it incorporates levels of technical and practical reflection (Shiel and Jones, 2003), but then extends practitioners through a consideration of the moral, ethical and socio-historical contexts of their practice (Gardner, 2009; Hickson, 2011). He proposed a structure with seven levels of reflection, the 'lower' levels involving the way that learners think about things (consciousness), and the 'higher' levels (critical consciousness) where learners pay attention to and scrutinise their thinking processes. These two categories might be described as 'thinking' and 'thinking about thinking', sometimes known as metacognition.

Whilst there are many models found in the literature, this has perhaps led to an inconsistency in the use of reflection and a variable understanding of it in both theory

and practice. Coach educators have not known how to facilitate the learning of such practices and there has been little distinction between superficial description and the deep reflection from which good learning can emerge. Educators may simply equate reflective practice with one of the well-known models of reflection without question and operate within that model, failing to apply sufficient attention on the person, the context, and developmental outcome under consideration. To address this, in 2016 The FA developed an 'Application of Reflective Practice (for coaches)' Project that sought to review the potential of reflective learning to support football coaching. Dr Jenny Moon was employed on a consultancy basis to design a bespoke training programme on reflective practice for coach educators, clearly laying out the conceptualisation on which the material is based. This aimed to ensure that the whole of The FA as an organisation is utilising the same concepts and methods for facilitating reflective practice.

2.2 Representations of learning

The FA's 'Application of Reflective Practice' Project was largely based on Moon's prior research, and in particular, her experience of running workshops for different professional and educational groups. Based on the works of Mezirow (1990), Moon (1999) presented five progressive stages of learning in a hierarchical manner: Noticing, Making Sense, Making Meaning, Working with Meaning and Transformative Learning.



Figure 4: Cognitive structure, transformative learning, and reflection (Sources: Mezirow, 1990, 1991; Moon, 1999; Richardson, 2000)

Coach education courses have focused primarily on the pedagogy of coaching (how to coach) and the assimilation of technical data (what to coach) rather than equipping coaches with the tools to effectively reflect upon and learn from their experiences (Knowles et al., 2005). Following engagement in reflective practice it becomes a

seemingly essential characteristic of professional competence (Moon, 2004; Cassidy et al. 2015; Cushion 2018). These skills could perhaps be fostered more effectively, with the learning of other skills and knowledge experienced alongside each other. According to research, the learning of explicit knowledge is deemed useful in terms of providing learners with technical and tactical knowledge and ideas. The wider overall message about the nature of coaching, characterised by its ambiguity, non-linear learning, problems, tensions, relationships and emotions (Jones & Wallace, 2005), and the skills which coaches may need to master in order to perform well and understand such complex social issues, was largely overlooked. Competencies such as developing greater behavioural agility for example; knowing how to adjust behaviour to new information or changing circumstances, and how specific behaviours and coaching styles may be more productive for certain outcomes than others (Tinning, 1982).

2.3 Coaching skills

According to the International Olympic Committee (IOC, 2021), there are several common characteristics and qualities that are shared among elite sport coaches, no matter how they are applied. These are:

- Possesses an in-depth understanding of the sport
- Has an eagerness to learn and develop
- Shares knowledge and educates others
- Is highly energised, enthusiastic, and motivating
- Knows the athlete and is aware of individual difference
- Is an effective communicator and teacher
- Is an active, empathetic, and compassionate listener
- Demonstrates character, integrity, discipline, and patience
- Leads by example and has a very high attitude to hard work
- Displays commitment and passion for the sport

From this list, it is interesting to note the crucial role that 'soft skills' play in high performance coaching and the impact they can have on overall success and effectiveness. Such soft skills, are closely related to attitudes, defined as 'a stable, long-lasting, learned predisposition to respond to certain things in a certain way' (Statt,

1998 p.10), stemming mainly from psychological traits, preferences, experience and background. As such, their development is often slower and more difficult than 'hard skills', which can be defined as the technical and profession specific knowledge and abilities that are learned through education or training and can be relatively easily measured (Balcar, 2016). Improving somebody's cooperation, for example, often requires changing his/her attitudes at first and then assisting in the mastery of methods to improve that skill (Balcar et al., 2011). Moreover, the measurement of soft skills is difficult as there is no objective way to test the skill itself; it is often an interactive process depending on context, opposed to hard skills. However, research suggests that soft skills are at least as critical as technical skills alone are not sufficient for success (Ajzen, 1991; Singh & Singh, 2008; Robles, 2012; Pritchard, 2013; Goswami, 2013; Williams, 2015; Bringula, Balcoba & Basa, 2016). As such, high levels of both hard and soft skills have become essential, particularly within the last decades, in order to meet the needs of today's modern athletes. (Borghans et al., 2006; Weinberger, 2011).

2.4 A shift in coach education

In recent years, there has been an intended shift from what had been described as traditional educator-centred, rationalistic patterns of coach education (e.g. Chesterfield, Potrac & Jones, 2010; Jones & Turner, 2006). In football, this shift was driven largely by the introduction of The FA Youth Award Modules in 2007. It aimed to fill the void of age-appropriate, child-centred coaching courses in the FA's core coaching pathway by blending traditional education methods with modern pedagogical approaches. Coaches progressed through the modules learning how to create an environment conducive to effective teaching, and by implication, effective learning. This included understanding the importance of individual learner differences, effective communication and how rapport and positive relationships can affect motivation. This emphasised that at the core of good coaching is an awareness of who and how one coaches, rather than what technical and tactical exercises are being delivered. Rather than a final summative assessment, ongoing formative assessment and feedback enabled coaches to track their progress towards the achievement of a set of detailed competencies and learning objectives. This marked a significant shift from the rigidly formulaic "teach to the test" approach that characterised previous FA coaching courses.

Following the Coaching Task Force Final Report (Department for Culture, Media and Sport, 2002) which identified limited opportunities for coaches to develop coaching as a career, few active professional coaches and the lack of the professional development of coaches, UK (United Kingdom) Coaching (formerly known as SportscoachUK) was charged with creating a professional coach education development model. This led to the introduction of a National standard for coaching certification (United Kingdom Coaching Certificate, UKCC) and a UK Coaching Framework vision of coaching as a profession that enables "excellent coaching every time for everyone" (Sports Coach UK, 2013, p2). These initiatives endeavoured to promote athlete-centred coaching practice, an approach that promotes learning through ownership, responsibility, initiative and awareness, and learner-centred coach education which intends to address the distinct learning needs, interests, aspirations and / or cultural backgrounds of each individual learner. They also asserted that by focusing on coaching as a critical thinking activity, it enabled and empowered coaches to make effective decisions (Sports Coach UK, 2007). This approach is increasingly being encouraged in coach education to help meet the complex needs of coaches, empowering them with greater opportunity for decisional input, autonomy and learning options (Paquette et al., 2014).

Indeed, former FA Chairman, Greg Dyke, recognised the value of the Youth Award Modules and the high level of positive feedback they received in his 2014 England Commission report, subsequently revamping many of the national governing body's courses in order to integrate constructivist, learner-centred strategies into the existing traditional programmes. In 2016, The FA announced further revisions to the coach education pathway, incorporating The FA Youth Award into the core coaching qualifications rather than running as standalone courses. This aimed to modernise the first steps of The FA's coaching pathway, whilst ensuring that all coaches have access to the principles covered, understanding how to apply them to the environment in which they coach. In order to further inspire, empower and support coaches to make better decisions, The FA also created its Coach Decision-Making Model (The FA, 2020), highlighting the core elements that are believed to underpin the thinking of effective coaches.



Figure 5: The FA Coach Decision-Making Model (The FA, 2020)

The four central hexagons each relate to a section of the England DNA (the coaching and playing philosophy of the England national teams), with The FA Four Corner Holistic Development Model (which emphasises the relationship between technical / tactical, psychological, social and physical elements, all of which influence long-term player development) sitting behind them. Surrounding all of that sits:

- The coach's individual philosophy
- The club's philosophy
- The club environment.

None of these elements act in isolation and decision-making will be influenced by factors from across the model, which will vary also depending on the kind of decision being made. However, in order to enhance coaches' decision-making skills and capture such learning, bringing it into awareness through reflective practice is key. This is the basis for critical thinking, self-awareness, and self-monitoring, which are critical skills and competencies to the professional development and lifelong learning of coaches at any stage (Howatson-Jones, 2016). Whilst coach development literature identifies the need for coaches to be self-aware regarding their impact on athletes, Millar et al. (2011) suggests that it is often a lack of such self-awareness that is the crucial limitation. This may be due to a lack of opportunities and tools that allow development of self-awareness or self-reflection (Cassidy, Jones & Potrac, 2009). There are also unknown unknowns, that is to say that we don't know what we don't know (Rumsfeld, 2002).

The current research intends to examine the reflective practice of a multidisciplinary team within an elite English football academy and the impact of reflection on their practice. Will their sense of self-awareness and access to meaningful opportunities and resources be among the factors that support and / or impede reflection in their practice? Given the relative paucity of empirical studies investigating the application of reflection and reflective processes of multidisciplinary teams in the real-world context, this study aims to generate evidence that will complement and provide additional insight to the existing literature. Ultimately, it is anticipated that the research may contribute valuable knowledge and / or fill the gaps in knowledge that currently exist.

2.5 The Elite Player Performance Plan (EPPP)

The Elite Player Performance Plan (EPPP) was introduced in 2012, supported by a budget of £320 million (Horrocks et al., 2016) The long-term aim underpinning the development of the EPPP was to improve the quality and quantity of homegrown players and increase the efficiency of youth development investment (The Premier League, 2011). This was largely in response to the ailing fortunes of the England senior team who were comfortably beaten 4-1 by Germany in the round of 16 at the 2010 FIFA World Cup. Incidentally, no more than a decade before, the German Football Federation (DFB) themselves had used a similar crisis as a catalyst for change. At the 2000 UEFA European Football Championships, an aging German squad, bereft of ideas, failed to win a single game and finished bottom of their group, marking Germany's worst performance in a major tournament finals since 1938. This prompted a radical overhaul of the country's youth development system, placing an emphasis on the development of more technically proficient homegrown players from grassroots level up. This was a decision that was later vindicated, with the German national team reaching six consecutive semi-finals at major tournaments and winning the 2014 FIFA World Cup. This subsequently provided the blueprint for the EPPP and the proposed revamp of England's existing youth development system.

Another significant factor for the development of the EPPP was the publication of the Lewis Report (2007) which reviewed the state of young player development in professional football. The Lewis Report made 64 recommendations for the improvement of the Academy system, with the following aspects of the talent development process amongst those falling under scrutiny: scouting, transitioning from

youth to first team football, education of young players, and the releasing of players. The EPPP, which was developed by representatives of the Premier League, The FA, the Football League, and other key stakeholders, sought to address the findings of the Lewis Report, ensuring that professional football in England would have a modernised and world leading academy system. It aimed to deliver an environment that promotes excellence, nurtures talent and systematically converts this talent into professional players capable of playing first team football at the club that develops them. To achieve this, it set out six key principles (The Premier League, 2011, p.12):

- Increase the number and quality 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.
- Seek to implement significant gains in every aspect of player development.

To measure performance against these aims, Academies are independently audited every three years, with up to 10 different factors considered in the grading, including productivity rates, training facilities, coaching, education and welfare provisions. Academies are subsequently awarded a categorisation of 1 to 4 (1 being the most elite). The higher a club's Category the more funding that is available to it, which in return, dictates the level of provision that is expected of them. Irrespective of their categorisation, all Academies must provide evidence of individualised coaching interventions that address each player's physical, technical, tactical, and psychosocial development. In doing so they must adopt a multidisciplinary approach, creating a fully integrated environment which services all aspects of a player's holistic development. The multidisciplinary approach may differ in its sophistication according to the resources available at a given club, but the adoption of the principles of this approach is considered a standard requirement for all Academies (The Premier League, 2011).

Overall, the EPPP represents something of a cultural shift within the youth development system of English professional football, which has seen the Premier League and FA invest more central income than ever before. Yet due its relative

infancy and lack of academic research, little is yet known about its overall impact. England's recent successes at youth international level, winning the Under-20 World Cup and lifting the Under-19 European Championships trophy marks an uplifting change. Similarly, the percentage of homegrown English players playing in the Premier League reaching a 17-year high of 41.2% in the 2021-22 season (The Times, 2021), would also indicate that a productive youth structure is now in place. However, there have also been a number of cogent criticisms of the EPPP including governance issues (Whittaker et al., 2016), inequitable and inadequate fixed scale compensation packages (BBC Sport, 2020), and concerns relating to players' mental health and welfare (Blakelock, Chen & Prescott, 2016). In some cases, football clubs have been forced to close or restructure their academies, citing EPPP related demands as a factor of particular salience in their decision (Whittaker et al., 2016). Ged Roddy, former Director of Football Development at the Premier League and architect of the EPPP acknowledges that "there were unintended consequences of the things we put in place...it's not perfect and we didn't get everything right, but lessons are being learned" (Roddy, 2021).

2.6 Models of reflection

Given that reflection is now advocated by coach educators across all FA coaching courses, the effective practice of reflection should be on the professional development agenda of coaching practitioners at all levels. Specifically, The FA introduced The FA Learning Cycle (Plan-Do-Review), which was adapted from Greenaway's Model of Reflection (1995). It has been a feature of many of The FA's coach education courses since the early 2000's, but it wasn't until the England DNA philosophy was released in 2014 when an increased emphasis on effective planning and reviewing of both training sessions and games saw it became a core coaching fundamental. The aim was to provide a consistent and strategic framework for the design and delivery of all England coaching sessions. It now features on all courses and is considered an essential tool for coaches to construct and deliver appropriate practices and sessions for their players before reviewing their effectiveness against the intended learning objectives.



Figure 6: The FA Learning Cycle (Plan-Do-Review) (The FA, 2015, p.17).

The Plan-Do-Review Cycle is a simple, flexible and practical framework that guides coaches to spend equal time on all stages. The plan stage encourages coaches to design activities with specific individual and group learning objectives, prompting collaborative discussion between coaches, players, and support staff. The Do stage aims to ensure that all activities are delivered as part of an overall learning and development strategy, understanding and applying the appropriate principles, techniques and methods of effective coaching. Finally, the Review stage is one of reflection which underpins continual improvement and professional development. Whilst this model is easy to grasp at a basic level and may therefore encourage coaches to engage with reflective practice, by itself it is too simplistic and only allows one to reflect on a technical level. Further support and guidance are necessary to achieve deeper levels of understanding and reflection.

To address this, The FA propose applying Borton's (1970) Model of Reflection, a simple three-stage reflective model that centres around just three questions: What? So What? Now What?. The framework works in a sequential and cyclical order and is therefore very easy to follow and is recommended for 'first-time' reflective practice. As such, it is embedded in the material presented to new coaches undertaking their first course at the introductory stages of The FA Coach Education pathway. Firstly, "What?" is where the coach senses and describes what has happened in an experience and what their role was. This can bring greater clarity to the experience, providing a solid platform on which one can build their reflection in order to gain new insights of self and practice' (Finlay, 2008). Secondly, "So What?" is a transformative stage in which the experience is conceptualised, evaluated and given meaning. Here the emphasis is on forming ideas, principles, or theories by analysing the meanings that one attributes to

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the experience. This includes consideration of other possible explanations, the identification of what is not known or understood, and areas for further exploration. Thirdly, "Now What?" is when possible actions are identified and rehearsed so that a response is made to the initial experience. The focus here is on translating the analysis into action. This action will result in another experience and the cycle will continue.



Figure 7: Borton's Model of Reflection (1970). Taken from Skinner & Mitchell (2016, p. 12).

The FA suggest that this can be considered as an over-arching model that draws together models that coaches are already familiar with, such as What Went Well, Even Better If, and Changes for Next Time. This provides coaches with specific questions which require to be considered in order. Furthermore, the model is one that can be used to reflect on both the coaches own delivery, and as tool to support the teaching and development of players.

Borton (1970) states that whilst these steps are distinctly described in order to help organise one's thinking, in the messy, non-linear reality of coaching, they are not separate. As such, they may not always occur sequentially, but in an interrelated interwoven in a dynamic fashion where multiple aspects of the cycle may be encountered simultaneously (Pickles and Greenaway, 2016). Coaches may also oscillate between stages, revisiting an experience or reviewing a situation before resuming the process of building an improved theory. Borton (1970) also describes how the result of completing the reflective process is that problems are solved, and a person internalises a greater capacity for responding to future situations well. It is argued however that this type of model is more of a retrospective process, looking back on or dealing with past experiences or situations rather than looking forward to actions to embed for improvement. As one of the purposes of reflection is to improve practice,

one needs to look forward as well as back. Ghaye and Lillyman(1997) suggest that a model in the form of a 'learning spiral' could assist us in this task. Furthermore, whilst Rolfe et al. (2001) state that Borton's (1970) Model of Reflection can benefit 'beginners', they consider it to be unable to help advanced practitioners significantly because it doesn't describe how critical thinking will be guided within each of the stages. To address such short falls, Rolfe et al. (2001) extended the model by adding cue questions such as "What was I trying to achieve?", "So what did I base my actions on?" and "Now what might be the consequences?" (Rolfe et al., 2001 in Skinner & Mitchell, 2016, p. 14) under each of the three headings (as shown in figure 8). They argued that these give the model greater credibility by showing clearly the means by which it can generate new knowledge and action.

Descriptive Level of Reflection	Theory and knowledge building level of reflection	Action orientated (reflexive) level of reflection.
WHAT►	SO WHAT>	NOW WHAT →
is the problem / difficulty / reason for being stuck / reason for feeling bad / reason we don't get on / etc. etc. was my role in the situation?	does this tell me / teach me / imply / mean about me / my client / others / our relationship / my client's care / the model of care I am using / my attitudes / my client's attitudes / etc. etc.	do I need to do in order to make things better / stop being stuck / improve my client's care / resolve the situation / feel better / get on better / etc. etc.
was I trying to achieve?	was going through my mind as I acted? did I base my actions on?	broader issues need to be considered if this action is to be successful?
actions did I take?	other knowledge can I bring to the situation? • Factual • Practical	might be the consequences of this action?
 were the consequences For the client? In myself? 	Personal could / should I have done to make it better?	
 In others? was good / bad about the experience 	is my new understanding of the situation broader issues arise from the situation?	

Figure 8: Rolfe, Freshwater & Jasper's Reflective Framework (2001). Taken from Skinner & Mitchell (2016, p. 14).

A study by Skinner and Mitchell (2016) into the reflective practice in healthcare contexts presented a synthesis of Borton (1970) and Rolfe et al.'s (2001) models. This offered a balance between structure and flexibility, ensuring the rigorous facing of difficult questions, whilst also enabling it to fit into the time constraints practitioners face. This is particularly important given that time to reflect has been cited in the

literature as a major obstacle to the use of reflection (Burnard, 1995; Haddock & Bassett, 1997; Smith & Jack, 2005; O'Donovan, 2006; Cirocco, 2007; Roche & Coote, 2008). The authors also argued that it is flexible enough to fit the nature and learning needs of the groups and individuals who are reflecting, as well as the character of the situation which is being considered. So, while the reflective model was designed for use by healthcare practitioners, its flexibility means that it can be used in various fields. This allows for the experience or situation to be examined in context of the specific field, offering the ability to adapt different sections of the model to have just one main question or instead have seven or ten. Whilst this may be extremely useful, providing a balance of structure and flexibility that is held in a potentially creative tension, the fact that prompt questions aren't rigidly structured could be confusing for inexperienced reflectors to know which ones could be omitted and which are salient for their particular reflection. Since it is acknowledged that there is no one size fits all model of reflection (Quinn & Hughes, 2007), rather than The FA Learning Cycle being applied at all levels of the coach education pathway from entry-level through to advanced qualifications, Skinner and Mitchell (2016) offer an example of a model which could be presented for a more advanced reflection.



Figure 9: Synthesising Borton and Rolfe et al.'s Reflective Models (Skinner & Mitchell, 2016)

The inside triangle represents Borton's (1970) thinking and the outside triangle denotes Rolfe et al.'s (2001), though with the added possibilities of using other peoples' questions too or no extra ones. The highlighted arrows between the two triangles show that it is possible to move between the two triangles at each of the three different stages.

There are many different forms of reflective practice that are considered integral to the continuing professional development, knowledge and practice of those working within the well-established health professions (e.g., medicine, nursing). It has therefore become a central tenet of healthcare practice, and its nature and evolution is well documented (Gibbs, 1988; Schön, 1983; Dewey, 1933). For some time, reflection has been promoted by researchers in the less mature field of sports coaching (Cropley, Miles and Peel, 2012). Although the volume of reflective practice research in sport has increased, there still seems to be a lack of evidence-based research. Coaching has therefore lacked critical tradition (Kirk & Tinning, 1990) and coaches are more likely to be seen sticking with 'safer', 'tried and tested', traditional methods (Harvey et al., 2010). Platzer, Blake and Ashford (2000) also highlighted a resistance to shared learning and an unwillingness of coaches to expose themselves to the judgement of others. This has made the adoption of such practice fraught with difficulties and resistance, with coaches staying within their 'comfort zone' rather than opening themselves up to selfreflection. As such, learning opportunities are frequently missed. Furthermore, research shows that most team sports are 10-years behind other industries in terms of innovation – largely because ex-players become coaches and they recycle old ways back into the system (Townsend & Cushion, 2015). In a world that has traditionally valued certainty and speed of decision making, the idea of pausing, engaging with feelings and staying with uncertainty, has typically been viewed with suspicion and cynicism. Furthermore, a coach shouldn't be seen to share their feelings, admit to vulnerability, or reveal their weaknesses. Such expressions may reduce their masculine standing, whereas emotional stoicism or expressing emotion through anger may enhance their masculine status, something which is still widely associated with strong leadership (River & Flood, 2021). As such the coach has often been presented as a calculated, dispassionate, and rational being who operates as if in a social vacuum.

From examination of existing literature within the sports coaching domain, the most common reflective methods that are utilised and reported on fall into the category of individual reflection (the most recurrent being reflective journaling). These methods of reflection have been reported to be more flexible, whilst providing a safe outlet for thoughts and feelings. Whilst there are many benefits to this, it is often a solitary and insular process which, if without critical enquiry, can lead to coaches reflecting upon

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their practice through rose-tinted glasses. Reflection is also a complex and challenging process which requires a much more sophisticated approach than briefly looking back at what has happened (Ovens and Tinning, 2009). The absence of differing opinions, insights, and challenging questions is likely to limit the level of knowledge and understanding that can be acquired (Knowles et al., 2001; 2006). Subsequently, this lack of collaboration can hinder the development of shared best practice (Horrocks et al., 2016).

Due to the advance in sports professionalism and the increased importance placed on adopting a multidisciplinary approach in order to organise and coordinate a holistic player development process, more shared approaches are beginning to infiltrate the literature (such as reflective conversations and reflective groups). This is no doubt further influenced by the 320% increase in staffing levels across the country's youth development system since the introduction of the EPPP in 2012 (The Premier League, 2021). Furthermore, a large proportion of these practitioners operate within the performance support services such as science, medicine and physiotherapy, and will have engaged in shared reflective learning and practice methods as a central component to their professional education. Multidisciplinary Reflective Practice Groups (RPGs) is one such method which involves bringing the whole clinical team together in a supportive and non-judgmental setting, to reflect on their practice, discuss individual cases in depth, and identify any necessary changes in practice and the subsequent training requirements. Led by appropriately skilled facilitators, multidisciplinary team RPGs provide a regular, safe, and confidential setting for the whole clinical team to reflect from the micro- to macroscopic level about their work. Crucially, the facilitator is not part of the team that they are helping to reflect, affording them an 'outsider' status that preserves their ability to hold a democratic, neutral stance in relation to the team they work with. This also ensures that they are not part of the potential problems they are trying to assist with. Within this setting, cohesion and consistency of approach is promoted, enabling a shared understanding of some of the dynamics that they are part of. This can help prevent fragmentation and ensure that there is less strain within the working environment and the interpersonal relationships that exist, leading to effective cross-functional teamworking. As such, multidisciplinary team RPGs that are embedded into ward culture, are considered essential for the safe and sustainable running of hospitals (Craissati et al., 2015; Patrick et al., 2018; Russell, 2017; Russell et al., 2018).

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Whilst no research currently exists on the use of reflective practice as part of a shared activity within a sporting context, its use within healthcare serves as an example of the potential benefits that could be realised. For instance, Johns (2000) argued that shared reflections on learning experiences could allow a greater understanding of those experiences than that achieved by reflection as a solitary exercise. Cross et al. (2004) further stated that, "Reflection is not, and should not be an isolated activity. Teamwork and partnership building require understanding and communication across professions, and collaborative reflection on practice is one way to achieve this" (p. 28). This also aligns with Mezirow's (1981) view on perspective transformation, which argues that learners need to access alternative perspectives in order to critique assumptions that can be achieved by support and interaction with others (Platzer et al., 2000). However, Francis, Owens and Tollefson, (1998) contended the assumption that all individuals in group settings will have the desire or skills to engage in such critical inquiry (e.g., some participants felt immediately comfortable in a group reflection setting, whereas others did not and struggled). Whilst there is a lack of clarity regarding the benefits of shared reflective practice within sports due to its infancy, the limitations of 'solitary' reflective within sport have been discussed by Knowles et al. (2001; 2006), who argued that individuals are limited by their knowledge and understanding (or potential lack of). Considering this, Manley and Meijen (2009) provided support for shared reflective practice for trainee sport psychologists as a way of obtaining alternative perspectives. An example of this is offered by Woodcock et al. (2008) who initially adopted a solitary method of reflection in order to facilitate a 'warts and all' approach (p. 495), but then reflected upon the same incidents with her supervisor, which provided alternative perspectives, facilitation and consequently utilised a layered style of reflective practice. Layered reflection refers to using various 'layers' to reflect on the same incident or situation, which is thought to provide more depth, or alternative perspectives, which are useful in an applied practice or learning situation and can counter the potential limitations of individual methods. The use of a shared and written approaches was also used in Knowles et al.'s (2012) work, where a reflective diary enabled increasingly deeper levels of understanding of personal, professional, and interpersonal relationships and how they interact, whilst a "critical friend" allowed multiple explorations of thoughts and feelings, facilitating sensemaking and presenting alternatives for action.

Overall, consideration of individual preference and the purpose of reflective practice has often been overlooked in research settings, especially when exploring large
sample sizes. Therefore, more research is needed to explore individual preference for the mode or technique employed, as well as the overall purpose. Whilst there are limitations to individual methods of reflection and it can be difficult to find opportunities for shared reflective practice in the sometimes complex and unpredictable environments that exist within sport, layering the reflective process where possible through the integration of mixed-methods will promote optimal individual and collaborative learning.

2.8 Conclusion

Research frequently demonstrates that coaches learn by reflecting on practical coaching experience (Gilbert & Trudel, 2001), hence both reflection and experience have been identified as essential elements of coach education (Cushion, Armour, & Jones, 2003). Various academics have studied reflective practice and experiential learning over the years and there are many different models have been created to unpick learning and make links between the 'doing' and 'thinking'. In recent years, coach education has attempted to move away from traditional formal education toward a more immersive method of instruction. As such, we have seen the introduction of an experience-based competency framework and the adoption of a consistent and wellfounded approach to reflective practice across the whole FA Coaching Pathway. However, in spite of the importance of reflection to enhance coach learning, there is a paucity of research that explains how coaches develop reflective capabilities, what reflection actually looks in practice, and what kind of learning results from reflective practice (Burnard, 1995; Durgahee, 1998; Greenwood, 1993; Henschel, 1999; Johns, 1995; Jones, 1995; Lowe & Kerr, 1998; Mallik, 1998; Newell, 1994). The intent therefore is to understand how reflective practice is implemented or experienced by coaches, and in what way do clubs initiate, sustain, nurture and influence this process through reflective activities within the real-world context. The research also aims to go beyond disciplinary boundaries of coaching and explore the reflective practice of a multidisciplinary team. Whilst this has gained attention in nursing and health care research, there is a lack of previous studies into the reflective practices of all disciplines affecting performance in football at an elite academy level.

Chapter 3 – Methodology

3.1 Introduction

All research is based on some underlying philosophical assumptions about what constitutes 'valid' research and which research method(s) are appropriate for the development of knowledge in a given study. In order to conduct and evaluate any research, it is therefore important to know what these assumptions are (Creswell, 2003).

This chapter discusses the philosophical assumptions and also the design strategies underpinning this research study. Common philosophical assumptions were reviewed and presented; the interpretive paradigm was identified for the framework of the study. In addition, the chapter discusses the research methodologies and design used in the study, including strategies, instruments, and data collection and analysis methods, while explaining the stages and processes involved in the study.

3.2 Paradigm

Research philosophy can be defined as the development of the research background, research knowledge and its nature (Saunders, Lewis & Thornhill, 2007). Research philosophy is also defined with the help of research paradigm. In the words of Cohen et al. (2000), research paradigm can be defined as the broad framework, which comprises perception, beliefs and understanding of several theories and practices that are used to conduct a research. It can also be characterised as a precise procedure, which involves various steps through which a researcher creates a relationship between the research objectives and questions. According to the definition given by Gliner and Morgan (2000, p17) 'paradigm is a way of thinking about and conducting a research. It is not strictly a methodology, but more of a philosophy that guides how the research is to be conducted'. Research paradigm and philosophy comprise various factors such as the individual's mental model, his way of seeing things, different perceptions, variety of beliefs towards reality etc. This concept influences the beliefs and value of the researcher, so that he can provide valid arguments and terminology to give reliable results. According to Terre Blanche and Durrheim (1999), a research paradigm is an all-encompassing system of interrelated practice and thinking that define the nature of enquiry along three major dimensions; Ontology, Epistemology and Methodology.

Ontology is the starting point of all research, after which one's epistemological and methodological positions logically flow (Grix, 2002). At the heart of ontology concerns what is out there to know, centring upon "what is the form and nature of reality and what can be known about it" (Furlong & Marsh, 2010; p185). Thus, if an ontological position reflects the researchers views about the world, then an epistemological position reflects the view of what can be known about the world (Furlong & Marsh, 2010). Two major research philosophies have been identified in the Western tradition of science, namely positivist (sometimes called scientific) and interpretivist (also known as anti-positivist) (Galliers, 1991). Because the positivist and the interpretivist paradigms rest on different assumptions about the type of data desired. As such, researchers tend to adhere to the methodology that is most consistent with their socialised worldview (Marshall & Rossman1980).

According to Morgan and Smircich (1980), positivists see the world as concrete; hence individuals are removed from human involvement in their material. Within this viewpoint measures are taken in relation to causal relationships to explain the world through universal laws which govern behaviour. Variables are isolated and measured in an objective manner (Andrews et al., 2006). The ontological position of positivism is one of realism. Realism is the view that objects have an existence independent of the knower (Cohen et al., 2007, p. 7). Thus, a discoverable reality exists independently of the researcher (Pring, 2000a, p. 59). The interpretive paradigm provides a radical alternative to the positivistic philosophy. It fundamentally rejects the belief that the social world (e.g. people, cultures, social practices, and social institutions) can be examined and understood through the assumptions and methodologies natural scientists use to examine the physical world (Potrac et al., 2014). The interpretive perspective then, is 'founded on the premise that the social world is complex' and 'that people (e.g. coaches, athletes and coach educators), including researchers and their research participants, define their own meanings' within respective social, political and cultural settings (Potrac et al., 2014; p32). From an ontological perspective, interpretivism rejects the view that the social world consists of 'hard, tangible and relatively immutable facts that can be observed, measured and known for what they are' (Sparkes, 1992 p.20). Instead, interpretivist researchers subscribe to the view that

the social world is something that is constructed within individuals' 'subjectivities, interests, emotions and values' (Sparkes, 1992: p.25). The interpretive paradigm therefore uses meaning (versus measurement) oriented methodologies, such as interviewing or participant observation, that rely on a subjective relationship between the researcher and subjects. Interpretive research does not predefine dependent and independent variables but focuses on the full complexity of human sense making as the situation emerges (Kaplan & Maxwell, 1994). This study is situated in the interpretivist paradigm and seeks the experiences and perceptions of individuals in order to gain a deeper understanding of the phenomenon and its complexity in its unique context instead of trying to generalise the base of understanding for the whole population (Creswell, 2007). The central endeavour is to understand the subjective world of subjects' experience (Guba & Lincoln, 1989), in order to understand and interpret their perspective of reflection and subsequently present this view in context. As such, every effort will be made to try to understand the viewpoint of the subject being interviewed, rather than the viewpoint of the observer. This paradigm assumes a relativist ontology, a subjectivist epistemology and a qualitative methodology. These elements are briefly explained below.



Figure 10: Research philosophy

Ontological theories tend to fall into one of two mutually opposing and exclusive categories, relativists and realists (Burr, 2003). These two perspectives represent the modern debate among researchers regarding reality: that of a single reality or multiple realities. Regardless of whether one positions themselves with a single reality or multiple reality perspective, understanding the repercussions that fall from this anchoring point are critical. A realist ontology asserts that there is a real world that

exists independent of the human mind and our perception of it whether it is comprehendible or directly experienceable (Bhaskar, 1979). Truth is achieved through reasoning rather than pure observation because only the results of causal forces may be observed rather than the causal forces themselves (Clark, MacIntyre, & Cruickshank, 2007). In other words, observation of an entity is not required to determine whether it exists. Relativist ontology is the belief that reality is a finite subjective experience (Denzin & Lincoln, 2005) and nothing exists outside of our thoughts. Relativism therefore relates to the idea that knowledge always comes from an 'evolved perspective or point of view' (Raskin, 2008; p. 13), where 'the truth of x is relative to the truth of y' (Zimmerman, 2007; p. 314). Reality from a relativist perspective is not distinguishable from the subjective experience of it (Guba & Lincoln, 2005). To state that the two cannot be separated is misleading because it implies there are two entities to separate. In this way of thinking, reality is human experience and human experience is reality. This is beyond two people experiencing an external world differently; rather, their worlds are different (Stajduhar, Balneaves, & Thorne, 2001). Universal "Truths" give way to negotiated truths in this antifoundational thought (Guba & Lincoln, 2005). With multiple interpretations of experience come multiple realities there are as many different realities as there are people. The purpose of science from a relativist ontology is to understand the subjective experience of reality and multiple truths. This research is grounded on a relativist ontology which rejects the existence of any possible correct reality (i.e. there is no one-size-fits-all method of reflection), but instead, there are multiple realities. These realities can be explored and meaning made of them through the human interactions that will take place between the researcher and the subjects of the research, and among the research participants (Chalmers, Manley & Wasserman, 2005).

Objectivism and subjectivism have been described as a continuum's polar opposites with varying philosophical positions aligned between them. These two major philosophical approaches are delineated by several core assumptions concerning ontology (reality), epistemology (knowledge), human nature (pre-determined or not), and methodology. Whatever their sociological persuasion, the researcher will find that these assumptions are consequential to each other, that is, their view of ontology effects their epistemological persuasion which, in turn, effects their view of human nature, consequently, choice of methodology logically follows the assumptions the researcher has already made. Traditionally, the distinction between either position has divided quantitative and qualitative researchers, with the quantitative aligned with

objectivism and the qualitative with subjectivism. Objectivist epistemology assumes that reality exists outside, or independently, of the individual mind and so, objectivist research is useful in providing reliability (consistency of results obtained) and external validity (applicability of the results to other contexts). According to Crotty (1998), the path that starts with the epistemology of objectivism – the view that there are objective and mind-independent facts about how things really are – leads, in a 'typical string', to the theoretical perspective of positivism and to quantitative methods. This way, survey research and statistical analysis might be employed to obtain a sufficient amount of data and confidence so that findings can be generalised to the population at large. The major goal of objectivists is to "identify causal explanations and fundamental laws that explain regularities in human social behaviour" (Easterby-Smith et al. 1991: p.23). To achieve this end, the generalisation of results from ample sample sizes is necessary, reducing the problem to its smallest elements. Objectivists therefore believe that reduction enhances a problem's comprehension.

In contrast, the assumption of a subjectivist epistemology means that the researcher makes meaning of their data through their own thinking and cognitive processing of data informed by their interactions with participants. There is the understanding that the researcher will construct knowledge socially as a result of his or her personal experiences of the real life within the natural settings investigated (Punch, 2005). As such, subjectivists argue that the involvement of the researcher, who is value-laden with inherent biasness reflected by their background, status, interests, beliefs, skills, values, resources, etc., should be actively encouraged – "phenomenologists attempt to minimise the distance between the researcher and that which is being researched" (Hussey and Hussey 1997: 49). In contrast to objectivists, subjectivists believe that objectivity in science is impossible (Hunt, 1993), instead focusing on the meaning of social phenomena rather than its measurement. Their goal is to understand and to explain a problem in its contextual setting; they do not perceive that it is a question of causality but rather it is a question of the meaning individuals attach to a given situation (Easterby-Smith et al. 1991; Hughes and Sharrock 1997). Subjectivists believe that it is pointless to categorise phenomena into causes and effects because "phenomena" are engaged in a process of continuous creation" (Hirschman 1986; p238). Furthermore, subjectivists do not utilise reductionalism as they perceive that a problem's understanding can only be comprehended through investigating the problem in its entirety.

In light of the above, the epistemological position associated with this MRes study will be that of subjectivism, assuming that the explanation of the (social) world is relativistic and depends upon the investigator's perspective. Furthermore, reflective practice is believed to be a very personal and intimate practice; how one person does it, what it involves for them and what they get out of it, might be very different from the next person. Therefore, to try and quantitatively measure the effects of such a concept would be highly complex and understate the individual and personal experiences of the participants. Whilst it may be considered a disadvantage that this approach produces subjective results, the flexible format of the interviews as a way of collecting data was a major advantage, as some nuances of the research such as exploring "emotions", and "critical incidences" could not be properly captured via a more rigid approach. Of course, the results from the interviews are not generalisable, because of the subjectivity of data obtained. On the other hand, their flexible format contributed for a deeper explanation and understanding of the dynamic interplay that exists between the cultural environment and the attitudes, opinions, and value placed on reflective practice.

Methodology as compared to the term 'methods' refers to the logic, strategy, potentialities and limitations lying behind the choice and use of a particular research method. There is also a theoretical perspective, a philosophical stance that informs a methodology grounding its logic and criteria (Crotty, 1998). Methods are quite simply the techniques or procedures used to collate and analyse data (Blaikie, 2000), the choice of which are free from ontological and epistemological assumptions and are guided by the research question.

3.2.1 Research design

The research design for this study uses a descriptive and interpretive approach, using qualitative methods of data collection through face-to-face, semi-structured interviews.

The difference between qualitative and quantitative researchers is how they answer the questions about ontology and epistemology, which subsequently influences how they develop their methodologies. Quantitative researchers who adhere to a realist ontology and a dualist or objectivist epistemology, and whose purpose is to explain, predict and control phenomena, tend to favour an experimental and manipulative approach. Here questions and/or hypotheses are stated in propositional form and subjected to empirical testing to verify or falsify these under carefully controlled and manipulated conditions. There is a heavy reliance on increasingly sophisticated forms of statistical analysis to interpret the data generated which is normally numerical in nature. In contrast, qualitative researchers who hold a relativist ontology, a subjectivist, transactional and constructivist epistemology, and whose purpose is to understand and interpret the world from the participants point of view, favour a hermeneutical and dialectical approach. This is described by Guba and Lincoln (1994, p111) as follows:

The variable and personal (intramental) nature of social constructions suggest that individual constructions can be elicited and refined only through interactions between and among investigator and respondents. These varying constructions are interpreted using conventional hermeneutical techniques and are compared and contrasted through dialectical interchange.

This study makes use of a qualitative research strategy in the sense that there will be no numeric data or quantitative data produced (Bell, 2005; Sarantakos, 2013; Silverman, 2004). The methodology implemented within this study will be that of indepth interviews (IDIs), a tool which will enable the researcher to take a deep dive into a complex and uniquely experienced phenomenon (reflective thinking) within the workplace context of an elite English football academy. Specifically, a one-on-one interview format will be used to elicit in-depth information from the participants across several different departments (operations, coaching, education, sports science and medicine, talent identification and recruitment). This will allow for the collection of a large amount of information about the views, experiences, feelings, and perspectives of each participant. Each department will be studied in situ as part of a collective whole, examining the same research question and using identical methods of data collection and analysis. In exploring how the workplace culture and environment stimulates critical reflection and how this in turn impacts on the workplace culture, the researcher is interested in commonalities and differences among the participants. This will enable the researcher to capture rich, descriptive data, gaining a deeper understanding of the phenomenon from a variety of perspectives, and how these perspectives are coordinated within the workings of a multidisciplinary team.

3.3 Context and sample

A judgement (also known as purposeful) sample was deemed to be the most conceptually appropriate approach for attempting to answer the research question. Here, individuals or groups of individuals are selected based on the assumption that they possess knowledge and experience with the phenomenon of interest (Cresswell & Plano Clark, 2011). The sample would not only be based on the researcher's practical knowledge of the research area, but the information that may be obtained would be done so in real world, complex situations, focusing specifically on how the process of reflection is viewed, experienced and applied by various stakeholders at multiple levels within a Football Academy under the auspices of the Premier League Elite Player Performance Plan (EPPP). This has the potential to provide a simultaneous analysis at both the individual and collective levels. Specifically, the researcher actively selected members of an Academy Management Team (AMT) whose key positions and specialism in areas such as coaching, education, sports science and medicine, talent identification and recruitment, will provide a multidisciplinary perspective on the research topic. The following charts illustrate the twelve individuals that have been selected to take part in the study, which, irrespective of the Academy's EPPP categorisation (whether category one and deemed to be among the country's elite, or category three and regarded as an entry level development environment), these positions are relatively consistent and so the research can potentially be replicated and applied at different clubs.



Figure 11: Category 3 Academy: Example Staffing Model (Premier League, 2011)



Figure 12: Category 1 Academy: Example Staffing Model (Premier League, 2011)

Furthermore, subjects with such specialist expertise would form a key informant sample (Bernard 2002, Garcia 2006, Gustad et al. 2004, Jarvis et al. 2004, Lyon & Hardesty 2005), enabling the researcher to collect information from a wide range of academy personnel who have first-hand knowledge about how critical reflection impacts on the workplace culture, and to what extent. These key informants are believed to know much about the culture and are both able and willing to share their knowledge and experience (Bernard 2002, Campbell 1955, Seidler 1974, Tremblay 1957). The Head of Coaching (HoC) acted as the gatekeeper, a critical role which allowed or denied the data collector access to the respondents (Holloway and Wheeler, 2002). The HoC was key decision maker given their working relationship and line management position to many of the respondents, therefore able to control who has access, and when. The following table shows the demographic characteristics of the research participants.

Participant	Gender	Role	Years in
			role
A	Male	Head of Academy Recruitment	10
В	Male	Lead Youth Development Phase Coach (U15-U16)	5
С	Male	Head of Player Development	<1

D	Male	Academy Manager	1
E	Male	Lead Youth Development Phase Coach (U12-U14)	<1
F	Male	Coach and Player Development Manager	2
G	Male	Lead Foundation Phase Coach (U9-U11)	5
н	Male	Head of Academy Performance Analysis	<1
I	Male	Professional Development Phase Lead Goalkeeping Coach (U18-U23)	1
J	Male	Lead Academy Strength and Conditioning Coach (U9-U16)	4
К	Male	Head of Education and Life Skills	3
L	Male	Head of Academy Medical Services	1

Table 1: Demographic characteristics of research participants

Gaining initial approval and access for the research study was a particular problem area, consuming a considerable amount of time, which is a common obstacle for researchers aiming to conduct in-depth qualitative interviews in an organisation (Patton, 2002, Shenton and Hayter, 2004). The ability to gain access was difficult because the Head of Research and Innovation, whose role it was to approve or decline all research proposals, left the club. After a number of productive meetings in which the research had been provisionally approved, there was now a state of uncertainty until a replacement had been appointed. It was subsequently decided that there was no longer a need for the role to exist and so the proposal was passed to the Director of Performance Science, and so effectively, the process had to restart from the beginning. And so, after a total of four months of formal and informal communication, access to the research participants was eventually gained.

3.4 Data collection

One essential element of all interviews is the verbal interaction between the interviewer(s) and the interviewee(s). Hitchcock and Hughes (1989:79) stresses that 'central to the interview is the issue of asking questions and this is often achieved in qualitative research through conversational encounters.' However, encouraging

meaningful, rich, and storied talk is not easy, it is a difficult craft or skill (Sparkes & Smith, 2014). Consequently, it was important for the researcher to familiarise himself with questioning techniques before conducting interviews. Questioning techniques, such as probing in order to generate data from interviewees, along with active listening and responding without invalidating the interviewee's comments remain important skills for qualitative researchers (Edwards & Holland, 2013). In an attempt to enhance my interviewing skills, I referred to relevant literature as a first step and subsequently tried to gain some 'hands on' experience by conducting a pilot study. Three one-to-one interviews with full time staff of an academy were carried out, using a mixed interview method – a combination of the informal conversational interview and the general interview guide approach. As interviewing is an active research process, immersing myself in the collection of data and utilising opportunities to practice my interview skills was invaluable. This enabled me to hone my question phrasing, appreciating and understanding the importance of taking time to build rapport with participants, whilst also developing active listening and observation skills, responding appropriately to participants' verbal and nonverbal cues. This helped me to engage participants in a conversational-style interview that was less rigid in its format, instead asking questions that were shaped by the participants' answers whilst also guiding the conversation with the goal of gathering information. By conducting pilot interviews using broad topic guides with few direct questions prior to the data collection, enabled the researcher to minimise any potential loss of meaning as a consequence of imposing a standard way of asking questions.

There are different approaches to qualitative interviewing; structured, semi-structured and unstructured interviewing. A structured interview is a data collection method that relies on asking a set of prepared closed-ended questions in a prescribed order to collect data on a topic. Unstructured or non-directive interviewing involves asking relatively open-ended questions in no predetermined format, allowing the respondent to talk freely while the researcher actively listens. A semi-structured interview combines both the structured and unstructured interview styles, an approach which allows the researcher to follow a checklist of issues and ask participants predetermined open-ended questions, whilst also ask probing and spontaneous follow-up questions in order to explore, deepen understanding, and clarify answers to questions (Darmer, 1995; Bryman and Bell, 2007). According to Darmer (1995) the semi-structured interview is neither a free conversation nor a highly structured questionnaire. Semi-structure interviews provide the opportunity to regulate the order of the questions and

the respondents have the possibility to expand their ideas and speak in great detail about diverse subjects rather than relying only on concepts and questions defined in advance of the interview. In other words, semi-structured interviews are more flexible than standardised methods such as the structured interview or survey. Considering this, in addition to the researcher's ontological and epistemological position, as well as the experiences gained from the pilot study, it was determined that semi-structured interviews would be the most appropriate and effective method for data collection in this thesis. Furthermore, due to my insider position, I already had some grasp of what is happening within the sample in relation to the research topic. Therefore, the viewpoints of the interviewees were more likely to be expressed in an openly designed situation which allows focused, conversational, two-way communication, rather than in a standardised type of conversation, as in questionnaires (Flick, 2002; Kohli, 1978). This will also enable me to develop rapport, or a productive interpersonal climate with the participants, which can be critical to the success of an interview. Whilst the structured interview has a formalised, limited set of questions, the semi-structured interview is flexible, utilising a predetermined thematic framework but also allowing new questions to be brought forward as a consequence of what the interviewees have said. This will allow the researcher and interviewees to develop unpredictable themes alongside the interviews, going deep for a discovery and bringing any relevant contexts into focus. The potential for semi-structured interviews to elicit such rich and subjective findings (Blaxter et al., 2010; Collis and Hussey, 2014), indicated it to be the method that best achieves the purpose of the study.

Following the pilot interviews, an interview schedule was developed with direct reference to my research questions based on the advice provided in Smith et al. (2009). The interview schedule (see Appendix A), which was used with all participants comprised of three broad areas (1) demographic information; (2) experiences of reflective practice; (3) critical incident analysis. Demographic questions, sometimes referred to as screening questions, were asked at the beginning of the interview to help gather basic background information about the research participants. This also sought to create a comfortable and relaxed start to the interview for the participants, posing familiar and easy-to-answer questions about themselves, allowing for a personal connection and rapport to be established. For example, these questions included age, gender, education level and number of years within their role. When asking the participants about their experiences of reflection, the aim was to produce questions which avoided imposing the researcher's own agenda and allowed for participants to

share their experiences and perceptions freely, thus creating knowledge inductively. I was aware of the risk that these questions, if sufficiently directive, could potentially create the themes which I would later identify, so I sought to avoid this by making the questions broad and open-ended. For the final section, a critical incident analysis (Tripp, 1993) task was used as a way to help scaffold participants' approach to reflective practice. Prior to the interview, each participant was asked to think of a critical incident that they consider to have had a high impact within their professional practice. This was phrased in familiar terms, describing a critical incident as the best of times (positive) and the worst of times (negative) that they had experienced. Having identified an incident, reflective questions within the interview based on Borton's (1970) 'What? So What? Now What?' model were used. Additional cue questions that were added by Rolfe et al. (2001) were also used, which allowed the participant room to expand their thoughts.

Ghauri et al. (1995) state that when using a special technique for collecting data the collecting data can be either primary or secondary. Bryman and Bell (2007) goes on by saying that primary data is information that the researcher gathers on his own, for instance by using interviews, questionnaires and tests. On the other hand, secondary data refers to the data such as literature, documents and articles that is collected by other researchers and institutions (Bryman and Bell, 2007). In this study, primary data is collected through qualitative research methods, using semi-structured interviews as the main tool. Individual interviews were carried out with twelve members of an Academy Management Team (AMT) at an elite English football academy. The questions, which were proposed based on the theory in literature review would guide them to discuss their experiences of reflective practice and its impact on multidisciplinary teamwork. They would also engage in a critical incident analysis (Tripp, 1993) task, articulating and exploring an incident that they consider critical to themselves and their professional practice. The semi-interviews were conducted faceto-face, in a private office at the academy's training facility. All interviews were audiorecorded and transcribed verbatim whilst field notes were also made to ensure descriptive validity. Field notes were used to highlight specific themes that occurred throughout the interviews, facilitating the researcher's memory of the session and aiding the reflective process. The total number of words contained within the transcripts was 114,622, captured through 11:44:05 of audio interviews. The average length of the interviews was 58:40.42. The researcher was the interviewer for all the candidate interviews.

3.5 Ethical considerations and reflexivity

Ethical considerations are important in research, particularly in qualitative research contexts, as researchers are in a powerful position when interpreting participant's words (Steffen, 2016). A reflexive approach is also required whereby the researcher vigilantly questions his/her own motivations, assumptions, and interests in order to manage any ethical tensions and dilemmas which may arise throughout the practice of research. This is particularly true for insider research which, given my collegial relationship with the participants, positioned me as an insider-researcher. Insider research refers to when researchers conduct research with populations of which they are also members (Kanuha, 2000) so that the researcher shares a particular characteristic with the study participants (Asselin, 2003). Griffiths (1998), however, states that the insider position cannot be identified with merely common characteristics such as race, gender, or ethnic history. My insider status can be clearly recognised as having multiple commonalities with my participants, such as shared culture, language, educational experiences, profession, work roles and responsibilities and collegial relationship. Sharing these commonalities may lead me to experience a deeper range of ethical and moral dilemmas and challenges once 'in the field' and during the process of my data collection, which could influence a distortion in the results. Being simultaneously employed as a coach at the host club. I encountered the dilemma of deciding what should be included and what should be omitted, which inadvertently shifted the power to me. At some points I asked myself if I should exclude certain people or certain details about those who gave me consent as it could harm their anonymity as well as that of others. Furthermore, the entanglement between researcher and participants' personal and professional relationships may lead to role ambiguity, which is associated with role duality (being the researcher and the colleague), and role conflicts (doing research work and helping with participants' work). It will therefore be important to apply self-awareness, honesty and reflection, closely following all the research ethics to ensure that the objectives of the research are achieved without bias (van Heugten 2004).

However, being a member of the group under investigation does not unduly influence the process in a negative way. According to Bonner and Tolhurst (2002), being an insider researcher can offer three advantages to the research. First, an insider will be able to better understand an issue; second, they will not disrupt the flow of social interaction; and finally, they will be able to extract true data from the participants as they can relate well to them. In addition, a researcher's familiarity with the cultural and political structure of an organisation will help them save time in trying to understand the issue they are studying as they already have some knowledge regarding the issue (Smyth & Holian, 2008). This is reinforced by Fleming (2018) who states that the main advantage of being an insider is the deep level of understanding, familiarity and interpretation of the context. By carrying out detailed reflection on the subjective research process, along with a close awareness of one's own personal biases and perspectives, it may be possible to reduce the potential concerns associated with insider membership benefit from the advantages discussed in the literature.

Written informed consent will be obtained from each participant, whilst they will be assured that their participation in the research is absolutely voluntary and they have the right to withdraw at any time. The participant information (Appendix B) and informed consent (Appendix C) documents will fully inform the participants about the aims and nature of the research, whilst also giving them ample opportunity to ask any questions they need in order to feel comfortable about their involvement. This aims to avoid any form of deception where participants feel that they have been misled or relevant information has been omitted. Voluntary informed consent is universally accepted as a precondition of research involving human beings and is generally regarded as central to ethical research practice. The Social Research Association (SRA) defines informed consent as: 'a procedure for ensuring that research participants understand what is being done to them, the limits to their participation and awareness of any potential risks they incur' (SRA, 2003: p. 28). This definition is similar to other definitions published by professional associations in the social sciences. The British Sociological Association (BSA) ethical guidelines, for example, talk of 'a responsibility on the sociologist to explain as fully as possible, and in terms meaningful to participants, what the research is about, who is undertaking and financing it, why it is being undertaken and how it is to be disseminated' (BSA, 2002: p. 3). Anonymity and confidentiality of participants is also central to ethical research practice in social research. In this study, the researcher will ensure that every effort is made to safeguard the participants so that any data provided cannot be traced back to them in reports, presentations and other forms of dissemination. To preserve anonymity and confidentiality pseudonyms will be used for participants and also for the location of the research.

The study also complies with the guidelines set out in the Bournemouth University Research Ethics Code of Practice: Policy and Procedure document. Online ethics approval was obtained on 26/06/2019 and the approval reference number is 26118. An anonymised copy of the approved ethics online checklist can be viewed in Appendix D.

3.6 Data analysis process

A qualitative design was chosen for this study. There are considerations which should be made when choosing which qualitative method to employ. The epistemological position should be considered as the philosophical principles underpinning the research will influence the chosen qualitative approach (Teherani, Martimianakis, Senfors-Hayes, Wadhwa & Varpio, 2015; Harper, 2011). Furthermore, the qualitative method should complement the research questions. Other factors that researchers might consider include the researcher's interest in a method and the researcher's expertise using a particular method (Priebe & Slade, 2006).

Thematic analysis was used to identify patterns of themes in the interview data, helping the researcher gain a better insight into the participants' perspective of reflection and how these impact on the workplace culture. A computer-assisted qualitative analysis software packed called Nvivo was used to thematically code the interview transcripts. The coding of the data followed the six phases of thematic analysis as prescribed by Braun and Clarke (2006). From the initial patterns preliminary codes were generated and then collated into candidate themes. Candidate themes were reviewed, refined and checked for internal homogeneity and external heterogeneity to ensure that they produced a coherent and meaningful analysis. This process involved two levels of reviewing and refinement. Initially, candidate themes were reviewed at the level of coded data extracts, whereby all transcript extracts for each theme were read to ensure that they formed a coherent pattern. If any data extracts were seen to not 'fit' with candidate themes, new themes were developed or reworked to accommodate extracts. For extracts that did not work within pre-existing or newly created themes, these extracts were discarded from analysis. Once all themes had been reviewed, a 'thematic map' of candidate themes was produced and applied to the second level of thematic refinement in which candidate themes were considered in relation to the entire data set to see if they 'accurately' reflected the data set as a whole. That is, comments from one participant could not result in a theme. Throughout the analysis process, therefore, the researcher often moved back and forth between the coded data, the entire data set, and the themes identified, coding any additional data that may

have been overlooked in earlier coding. Once candidate themes had been refined, a description of the 'essence' of the themes was used to define each theme and subtheme (Braun & Clarke, 2006). This final stage was in collaboration with the research supervisors. Finally, in order to ensure trustworthiness of the research, appropriate criteria for qualitative research was applied. According to Schwandt (1996), criteria for qualitative inquiry are "standards, benchmarks, and in some cases regulative ideals, that guide judgments about the goodness or 'quality' of inquiry processes and findings" (p. 22). Lincoln and Guba (1985) refined the concept of trustworthiness by introducing the criteria of credibility, transferability, dependability, and confirmability to parallel the conventional quantitative assessment criteria of validity and reliability. They describe a series of techniques that can be used to conduct qualitative research that achieves the criteria they outline. The techniques that were used to ensure the rigour of this research were prolonged engagement, persistent observation and reflexivity.

3.7 Quality of data

According to Tracy (2010), high quality qualitative methodological research is marked by the following eight criterion: (a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence. Given the paucity of research that exists investigating the reflective practice of multidisciplinary teams within sports settings, despite the increased demand for multidisciplinary team approaches within professional sporting contexts, and the fact that reflective practice is now universally considered a key factor in expert learning (Jonker et al., 2012), the study is considered relevant, timely and potentially significant. The research question emerged from interest and necessity and will hopefully spark more questions leading to further inquiry.

The sample, and subsequent consideration of a range of ethical issues are elements that influence the robustness of the study. By selecting 12 participants whose positions within the Academy Management Team (AMT) are consistent across multiple staffing models irrespective of the Academy's EPPP categorisation, there is potential that the study can be replicated and applied at different clubs. Whist transferability cannot be proven with 100 percent certainty, this aims to ensure that the research study's findings can be applicable to other settings, and contexts. Within the present study, the researcher endeavoured to adhere to the highest standards of ethical conduct,

protecting the anonymity and confidentiality of all participants, maintaining rigour and integrity at all times.

Commitment and rigour has further been demonstrated by engaging with the topic under investigation for a prolonged period. Undertaking a pilot study and spending a prolonged period reading around the conducting of high-guality interviews and analysing data. Tracy (2010) argues that rigour can also be demonstrated by selecting a sample that is appropriate to achieving the aims of the research. The appropriateness and breadth of the interview sample given the goals of the study has been demonstrated through the access to 12 members of a Premier League Football Club's Academy Management Team, spanning seven different departments (operations, coaching, education, sports science and medicine, talent identification and recruitment) and capturing rich, descriptive data through almost 12 hours of interviews. Furthermore, the individual transcripts of these interviews underwent a thematic analysis, looking for similarities within and across all participants. Additional credibility checks (Elliott et al., 1999) were carried out during the study in which my supervisor and peers looked through materials (such as the interview schedule) and the data at different stages of the analysis process. The aim of this was to support reflective and reflexive thinking, ensuring that the thesis produced was an "adequate representation" of the constructions of the social world under study" (Bradley, 1993, p.436).

Yardly (2000) highlighted that another quality of good research is transparency and coherence. I hope that through discussions in this methodology chapter the reader is able to see an appropriate fit between the research question and the methodology selected. I have also tried to be transparent about the procedures by including information about how the interview schedule was constructed, how the participants were selected, how the interviews were conducted and how the resulting data was analysed. I have also included transcript extracts in the appendices to allow the reader to reflect on my interpretations and consider possible alternatives (see Appendix E).

Chapter 4 – Interpretation of research results and discussion

4.1 Introduction

In this chapter an interpretation of the research results is presented and discussed with reference to the aim of the study, which was to examine the extent to which a team of multidisciplinary practitioners within an elite English football academy actively engage in critical reflection as part of their everyday practice.

Each interview transcript was reviewed, and 145 codes were derived. The preliminary categories and codes were recorded along with extracted verbatim sections showing issues that were discussed in relation to the codes. These groupings represented the core of the statements and were gradually converted into usable data through the identification of themes, concepts, or ideas that had some connection with each other (Austin & Sutton, 2014). Ten organising themes were subsequently deduced, which were re-organised into three unifying global themes. These global themes summarise the main propositions of the ten organising themes and the 145 codes that were elicited from the participants (see Appendix F).

The following chapter is divided into two sections, each related to one of the three global themes that was constructed: 'Professional Support' and 'Levels of Reflection'. The third theme; 'Barriers to Reflection', weaves through these two sections at various points as opposed to being presented in a discrete linear fashion. This is because it is inextricably linked and interwoven into the two aforementioned themes, having a direct and inevitable effect on the support that one receives and the level of reflection to which they engage. It would therefore be a difficult and counter intuitive task to attempt to untangle them, and to do so may detract from the rich and free-ranging discourse elicited from the participants.

4.2 Professional support

There were 41 raw data codes identified within the global theme 'Professional support'. These codes were made explicit and further interpreted as two organising themes, each having a common point of reference and high degree of generality, unifying ideas regarding the subject of inquiry. The two organising themes are 'Mentoring and formal support' and 'Communities of practice and informal support'.

4.2.1 Mentoring and formal support

According to Roberts' (2000, p. 162), mentoring is 'a formalised process whereby a more knowledgeable and experienced person actuates a supportive role of overseeing and encouraging reflection and learning within a less experienced and knowledgeable person, so as to facilitate that person's career and personal development'. Interpretation of the current research results revealed however, that variables other than the level of knowledge, skills and experience that a mentor possesses can have a significant effect on the development of reflective practice in the mentee. That is to say that effective mentorship isn't necessarily about authority or seniority, but more so about mutual respect, honesty, trust, active listening, constructive questioning, and supportive challenge when needed. Whilst the ability to share experience, knowledge and expertise was acknowledged to be beneficial, it was also recognised to be encumbered by personal preferences and implicit bias. This was particularly true of uniprofessional mentorship, where the mentor and mentee worked in the same discipline or profession. As such, some participants actively sought interprofessional mentorship from mentors outside of their own discipline. This approach is best facilitated within the realities of practice and provides opportunities for the mentee to reflect on and develop from the experience (Marshall & Gordon, 2005). Furthermore, given the modern holistic approaches applied within academy football environments and the multi-faceted nature of football, this approach aims to develop interprofessional competencies and capabilities that promote collaborative practice. This was captured by Participant C who stated:

There's one guy who I consider a mentor, we almost mentor each other in fact. I think this guy is really talented, I really do. He's the best I've ever worked with. He's only a young guy but is a really intelligent practitioner who possesses a different skill set to me. When we first worked together, I told him I want to be a top coach but my knowledge on sports science is limited. So if I want to operate at the top level, I need to develop my knowledge to be able to challenge sport scientists, because I'm not comfortable sitting in a meeting where they dictate or tell me "he's done too much of this, or not enough of that". I need to be in a position where I can challenge that and disagree based around knowledge, not just for the sake of having a disagreement. So, I put it to him, I said "I'd like you to educate me on analysing data, on periodising a schedule and what that looks like, and in

return, if you want to be a top sport scientist, you need to incorporate some technical work in your programme. I'll help you put together warmups that integrate a ball, and if you want to go down the coaching route to supplement your sports science knowledge, I'll support you through your B License. So, that was kind of a mutual respect, he taught me a great deal about analysing data and it got to the point where we would have medical meetings that I would sit in on as part of the multidisciplinary team, and could hold a conversation and articulate my opinion based on the knowledge I had acquired through this experience. And so, this provided a real challenging environment for all staff in which none of us were right, we all challenged each other with the interest and intent of improving each other. We all knew coming into a meeting that, if we weren't well prepared with the appropriate information, we would get caught out. So over time, the level of detail went through the roof.

Whilst there is a paucity of research that exists investigating the mentoring processes in sport, Bloom et al. (1998) suggest that it is one of the most valuable ways to develop practitioners. This is supported by Allan (2007) who reported a range of benefits of mentoring programmes, including an enhanced personal effectiveness, greater reflectivity and professional growth, enhanced energy and job satisfaction, and improved problem-solving skills. The current research shows that most participants supported these claims:

We understand how we work together and ultimately share a common passion. This provides the consistent, continual support to develop and grow. Being able to chat through problems not only enables me to solve them but develop my own skill set (Participant C).

I enjoy the engagement with the mentors, and I think that someone asking me more difficult questions enhances my reflections, encouraging me to reflect more deeply on the experience (Participant D).

I think having Dave as a mentor is a massive help for me. The detail and level of commitment that he goes in to is second to none. And then the reflection after is incredible. He's really put me in a position where I think I'm on another level now (Participant I). Furthermore, Jones (2012) discovered numerous benefits for both mentees and mentors, such as relational job learning, in addition to successful personal outcomes like increased confidence and happiness for both parties. Furthermore, Nelson, Cushion and Potrac (2012) found that by having practitioners critically reflect upon their experiences, mentors can help mentees become increasingly aware of the dynamics specific to their context. In fact, some participants cited mentorship as their preferred learning method as it created a forum for sharing experiences, facilitating an interchange of views knowledge and understanding (Knowles et al., 2001). This was articulated by Participant D who stated:

Reflecting in isolation definitely has a place, and that should be encouraged, but the process of actively engaging with mentors, I think, is pretty critical.

According to Dominguez and Hager (2013), mentoring is approached from three different theories. Developmental theories approach mentoring from a traditional standpoint of hierarchal roles in which mentoring takes place in a series of stages from initiation to termination. Learning theories look at mentoring as a mutual learning process in which the mentor facilitates rather than directs the mentee in the growth process. Finally, social theories put mentors in the position of a role model who not only provides information, but also models behaviour and facilitates social learning. In addition to the mentoring styles, Green (2002) suggest that there are also three prominent mentoring models that have been devised; the Apprenticeship Model, the Competency Model and the Reflective Practitioner Model. The apprenticeship model and competency models assume that there is an optimum way to learn, either by emulating an experienced expert, or acquiring a specific set of competencies. The mentor's role is to provide a model for imitation or act as a systematic trainer who observes and provides feedback on the mentee's progress with reference to predetermined knowledge, understanding and skills (Geen 2002). This pre-supposes that the mentor is an infallible expert and makes little provision for creative thought. It also assumes that learning is a transactional process, where knowledge can be transferred from one person to another (Bjerkholt, 2013, 2017). The Reflective Practitioner Model is founded on self-analysis and reflection; practices that encourage professionals to question their own actions and reasons for doing things. Reflection appears particularly relevant in pedagogical activities where practice is complex, applied and contextualised, and in which learning, therefore, requires a degree of introspection

(Lyle 2002). It is considered a valuable way in which individuals can analyse and evaluate experience, enabling them to subsequently learn from it (Burns and Bulman 2001). Different mentees and different mentoring programs may benefit from different mentoring styles and models or an integration of these depending on the goals and needs of the mentee. Mentoring after all is not a generic and objective practice; rather, the way it is experienced and enacted is situated in the contexts that are both personal and social.

Interpretation of the results showed that the mentoring model implemented by the academy was closely aligned to the reflective practitioner approach, emphasising the importance of trusting, supportive and affirming relationships, whilst establishing a safe space for honest and critical reflection. The aim is to improve and sustain a culture of professionalism by encouraging reflection and conversation by practitioners about their profession, developing a broad mentoring network that is built on equality, valuing different competences, and promoting a mutual learning environment. This constructivist approach to mentoring is not only closely aligned to the pedagogical philosophy of the academy, but it also attempts to build psychological safety in an environment that has traditionally been characterised as tough and masculine. The reliance on traditional hierarchical relationships in such environments can generate fear of evaluation and judgement in mentees, inhibiting critical reflective practice. This is a concept that Hobson and Malderez (2013, p. 89) refer to as "judgementoring", something which Participant B discussed experiencing prior to changes in the work environment:

I felt really drained, energy-wise it was so draining. I was just constantly hiding and changing my session so that when he came out, I was coaching in a manner that he would approve of. That was almost to ensure that he didn't monitor you too much and you could go back to coaching your own way. If I could sum it up, it was an energy sapping period, you just didn't enjoy coming to work. I hated the environment; it would suck the life out of you and lacked any level of psychological safety.

The academy has since embedded a successful coaching and mentoring programme to help staff develop core mentoring skills such as active listening and effective questioning, providing constructive feedback, and goal setting. This aims to create a culture that sees mentorship as an effective way of developing individuals, and one in which trained mentors are more inclined to use developmental approaches. When speaking of the contrast in workplace environment, Participant B revealed:

I'd say I'm quite comfortable being vulnerable and saying I don't know everything yet. I think people may be uncomfortable because they fear for their job or their reputation, or maybe they've had an experience where they've seen others fail. It creates this environment in football where reflection isn't seen to be particularly useful, because you basically just end up reflecting and confirming your bias, searching for everything that supports your argument to make you look and feel more powerful. So, you're not really reflecting, you just continue down the same path without ever branching out. Whereas environments in which it's okay to be wrong, where you get rewarded for the intention or behaviours rather than the outcome, will tend to be better for reflecting. I'll happily hold my hands up to myself and everyone else and saying, "I got that wrong, and this is what I'm going to try and do differently". Could I have done that when Martin was here two years ago? No chance! I'd have been battered for doing it, they would have said, "in your position you shouldn't be admitting mistakes like that". I'd have been thinking, "what are they going think of me?". "Is this going affect my job?". So no, I couldn't have done it. I'm in a position now where I can do it and I feel like I've got the support of the people around me.

By creating a facilitative environment that provides adequate support through mentoring relationships, the data revealed that 75% of the participants considered mentorship to be important in developing their ability to self-reflect. This was demonstrated by Participant D who stated:

I've been fortunate, certainly in recent seasons, where I have actively engaged with both external mentors, internal mentors, and people who I would consider experts externally. That's really helped that process of talking through it again in almost a semi structured way, being questioned and challenged on my reflections in a way that could lead to actions. That's been really beneficial. I enjoy the engagement with the mentors, and I think that someone asking me more difficult questions enhances my reflections, encouraging me to reflect more deeply on the experience.

Another interesting aspect of mentoring emerged from the findings in relation to the nature of the mentoring relationship. It appears that the development of mentorships was predominantly voluntary and informal, developing organically because the mentee and mentor readily identify with each other and feel a certain level of comfort or chemistry (e.g. similar interests, personality, work habits, and expectations). Previously, Jackson et al. (2003), suggest that the interpersonal aspect of such selfselected mentoring relationships has been found to be critical to long-term mentoring success, serving as an important resource to navigate personal or professional challenges and provide social support. These were mainly intradepartmental peer mentoring relationships between employees at the same or similar lateral level in the Academy. This was particularly true among the coaching staff, perhaps due to the number of coaches working in academies relative to other departments, resulting in an elevated frequency of direct and personal social interaction. A rewarding interaction in the mentoring relationship between colleagues can provide a basis for reflection as a collegial activity, which helps in gaining the "informed collaboration of colleagues" in the ongoing efforts to learn to operate more effectively (Moran & Dallat, 1995, p. 22). Informal mentoring activities such as these are a sign of a healthy organisational culture (Reimers 2014). This was highlighted by Participant D:

The value of being able to engage with others and say; "this is what I'm thinking, this is what I thought happened there" ...I love to play that out. Joe's been great since I moved into this role where I can say to him; "this was my intent", or "this has happened, my intent is to do this"... and that gives me a real opportunity to learn because I get feedback from Joe to say that nine times out of ten my intent is right, so I crack on. But there might be "your intent is right but..." and that's really helped my reflective process because I know, if I just stick within my own head, probably like anyone, I'm going to be limited to the ability I can learn.

While several participants benefitted from these ad hoc peer mentoring relationships, their inherent lack of structure meant that some individuals held unmet expectations and felt excluded from such opportunities. This was particularly true of participants in specialist medical, scientific, analytical, and recruitment disciplines. They cited reasons such as working remotely due to the nature of their role, having fewer staff in comparison to other departments, and the lack of a specialist line manager within their particular field. This led them to feel isolated from their peers, and therefore difficult to

identify effective peer mentors. Whilst the Premier League has ring-fenced funding for the creation of a Head of Coaching at all 92 Clubs in the Football League, the same provision has not been made available for other disciplines who may experience additional challenges in forming supportive peer relationships due to a lack of equitable access. This was initially raised by Participant H when he stated that he had been forced to rely on other, often less personal, peer mentoring models:

Since coming into a new role, I've struggled a little bit 'cos I'm in a little bit of limbo; I've got a line manager who is on the same level as me. There are conversations about who will be my line manager going forward. Whereas before, when I had a definitive line manager, who was the Head of Academy Performance Analysis, I always knew that I could go and vent. Whereas sometimes I've struggled now, just purely because there is that lack of person to vent to.

In this instance, a restructure within the performance analysis department appears to have caused a level of ambiguity in relation to the distinct roles of individuals and subsequent mentoring opportunities. Similarly, Participant A felt that the limited access to effective mentoring support was due to the absence of a staff development specialist within the recruitment department:

I think we should be doing more internally. I think that from a coaching perspective, they're heading in that direction with a Head of Coaching and people like that. We need to do that from a recruitment perspective. We haven't got our mentor or sounding board.

This sentiment was echoed by participant K who said he was unable to identify a suitable mentor to best suit his needs:

One of my own targets is to maybe liaise with some type of mentor to bounce off of but I haven't actually found anyone that will really. I have thought about it in quite a bit of depth, but I would say no, in terms of having someone where you could really bounce ideas off, I've probably not. It's something I need to do. Whilst it may be evident that a multidisciplinary approach has been applied to the practice of mentoring, there is perhaps a lack of interdisciplinary mentoring relationships in which disciplines combine, integrate and work in conjunction. By failing to extend beyond traditional boundaries and develop effective cross-disciplinary and interdisciplinary mentoring networks with colleagues outside of their own specialism, inhibit the critical discussion of wide-ranging issues from a macro perspective. To address this, the Club have introduced the Optimise Leadership Programme, a non-accredited, internal 12-month training programme designed to bring together a diverse group of employees from all levels. This provide more formal structures to support interdisciplinary mentoring relationships, whilst reflection is a key component of the programme, underpinning each module by encouraging participants to consider how their practice compares to the themes explored.

Whilst research suggests that the selection of mentors by the mentee may offer a better opportunity for a genuine, meaningful relationship (Sambunjak et al., 2006), some of the participant of the current study felt that the potential for self-selection bias was a problem of informal peer mentoring. Participant F stated:

When I write down my trusted circle and look at their gender, age, academic background etcetera, it's a pretty homogeneous. They are all males. They are all probably between thirty and fifty. They've probably all got a degree. I think four out of the five are Caucasian. Is that actually useful or is it an echo chamber? I don't know. Is it something to consider? It's something I'll reflect on.

By acknowledging the different types of unconscious bias that may hinder a successful mentoring relationship, Participant C expressed the need to feel challenged and pushed out of his comfort zone, exposing himself to different perspectives and engaging with mentors from more diverse backgrounds:

I think a mentor is always beneficial, but then you have to be careful with the mentor's bias. We're all, in some way, shaped by an experience, that might be a positive experience or not, that will shape our behaviour and our thoughts. So, I think you've got to be very, very careful with a with a mentor, it has to be the right one. If you select yourself, you're going down the biased route again aren't you. If I was picking a mentor or looking for a mentor for myself, they'd have to have different qualities to me, to be able to try and probe and point me in a different direction to which I've not really been guided before. So, they know a great deal and have different skills to me. Shove me down that route and I'll learn a little bit more.

When internal mentorship was not available, participants revealed that they had sought external mentor support, whether they be assigned or encountered organically in formal courses. This was demonstrated by Participant F who stated:

I'm on the Elite Heads of Coaching (EHOC) course now, and one of the things I'm hoping for and am really keen to get is some really appropriate, useful, mentoring support. I had a mentor when I was coaching at England cricket. I probably met him three or four times a year, which I found really useful. But I don't specifically have that now.

One of the participants (Participant K) suggested that having both internal peer and external professional mentoring programs in place could be beneficial to staff, because they can receive the perceived professional development benefits that may come from an expert and the perceived personal and social benefits that may come from a peer.

I think the external has its positives in terms of they're not within, they can look from the outside-in, whereas someone that knows the environment is also useful because, they might know the dynamics of this particular environment 'cos it's quite an unusual space to work in.

When mentoring support is not available, alternative support mechanisms are sought from a community of people that can be counted on, including trusted colleagues, action learning sets, a spouse, family members or friends. Developing a community of practice (CoP) was an approach that Participant A utilised in response to working remotely, where he often felt isolated and disconnected from his co-workers:

Because I mostly work from home, I'm on my own. But if I think it's a situation which is sensitive, without a shadow of doubt I'll speak to my wife. I will say; "this is what's happened, what do you think?" My wife doesn't know anything about football, but she's really balanced in what she would say was the right way to do things and perhaps the wrong way to do things. She'd be honest enough to say to me, I don't think you should have done that. Which is fine, you know, but I need clarity on things.

4.2.2 Summary of mentoring and formal support

It is recognised that mentoring has an important role to play in developing staff and facilitating reflective learning and practice. Interpretation of the research reveals that various members of a multidisciplinary team considered the internal mentoring programme within the workplace environment to be supportive and useful in developing their ability to self-reflect. The reflective practice and strategies of interaction learnt through formalised mentoring and incorporated into the academy's continuous professional development (CPD) framework, was seen to enhance psychological safety by ensuring a positive team climate. This fostered cooperative and non-hierarchical developmental relationships based upon mutual reciprocity between staff, creating an environment for open communication, reflective thinking, and problem-solving activities. The research did however identify potential barriers which, unless addressed, may prevent effective mentorship from being accessible by all individual staff members. The problems associated with self-selection and homogenous mentoring pairs was highlighted, as it was felt that this may constrain or bias the reflective practice that occurs. Being aware of these biases and possessing the conscious commitment to correct them is important if one is to maximize the mentoring relationship. The inconsistency of mentoring activities across departments and a lack of resources also emerged as potential weaknesses, which may hinder the effectiveness of the mentorship programme. This was particularly true of participants in specialist medical, scientific, analytical, and recruitment disciplines who either worked remotely or across a number of different sites, or lacked a line manager to provide the direct and appropriate support and guidance they required. Where a perceived lack of access to mentoring existed, participants would draw upon their own informal CoP.

4.2.3 Communities of practice and informal support

A community of practice (CoP) is a self-organising and self-governing network of people who, through collaboration and engaging in a process of collective informal learning, strive to become better practitioners. In the absence of mentor, Participant A

discussed how he will draw upon the expertise of the individuals and groups involved within his own CoP:

I like to bounce situations or events off other people. As you can imagine, there's a circle of trust; a circle of people that aren't there just because they agree with what I say or agree with my point of view, but because I respect their knowledge and experience. I don't necessarily always agree with them on every aspect, but I know full well that I will get an honest response which, on reflection, may lead me to a better course of action than the one that I may have taken.

The concept of learning through CoP's was borne by Lave and Wenger (1991). A CoP is a set of people who "share a concern, a set of problems, or a passion about a topic, who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 4). They are organic and self-organised groups of individuals who share a common interest and voluntary commitment to resolving an issue, improving their skills, and learning from each other's experiences. A successful CoP is one in which the contribution of each member is highly regarded, whilst mutual trust, respect, and reciprocity is essential in creating a "safe" environment where members feel that they can share their challenges and explore new ideas, in addition to exchanging mere facts. This again illustrates the importance of psychological safety in developing effective reflective practice, a sentiment that was consistent among the research participants. Participant L stated that in a psychologically safe environment, he is more likely to be authentic, demonstrating vulnerability and personal sharing:

I'm not scared to show vulnerability at times, I wear my emotions on my sleeve; if I want to cry, I'll cry. If I want to shout or scream, it doesn't bother me who I do it in front of, I am who I am. And so that's the key thing I guess, if I reflect on it now, I'm not scared to show vulnerability, but there is a time and a place. I think you can use vulnerability for your own gain because if you can show vulnerability and get someone else to be vulnerable, then it's a gain.

This sentiment was echoed by participant B who said:

Football is quite male dominated and because of that it's quite egotistical...no one wants to show any vulnerability. But if you create such a psychologically safe environment where someone isn't going to get the sack or feel like they're going to get hammered for saying; "yeah, I haven't had a particularly good season, but I tell you what, I took loads from it". If people in positions of considered power act like that, I think it becomes more comfortable for everyone.

Participant C also discusses trust and challenge as key constructs:

There's a good guy I worked with for probably five or six years who I trust one hundred percent. I can ask him a question and he'll not give me an answer that he thinks I want to hear, he'll tell me the truth in his eyes, and I value that. I can't deal with saying what people want to hear, we need to be honest and we need to be truthful. So, there are one or two people that I would speak to, whose opinion I would trust a hundred percent. I don't consider them as mentors, we almost mentor each other. Instead I'd consider them to be friends, but friends I've gained and developed through mutual respect at work and people I would consider to be the best in their field.

The idea that learning involves a deepening process of participation in a CoP has gained significant ground in recent years. It is based on the assumption that engagement in social practice is the fundamental process by which we learn. Given that reflective practice is "the relationship between an individual's thoughts and action and the relationship between an individual and his or her membership in a larger collective called society" (Leo, 1990, p. 204), a CoP has also emerged as an avenue for reflective practice. In Wenger's terminology, members are able to collude, collide, conspire and conform in developing their understanding of the topic. As is the intention with CoP's, the members act as resources for each other, 'making sense of situations, sharing new tricks and ideas' (Wenger, 1998, p. 47).

It is argued, however, that the process of learning through CoP's may involve 'sensemaking' rather than critical reflective learning (Ng & Tan, 2009). Sensemaking has been defined as a natural kind of human activity in which large amounts of information about a situation or topic are collected and deliberated upon to form an

understanding (Pirolli, 2007). This can then be transferred into meaning-making activities, leading to possible problem-solving strategies and solutions. Bennet and Bennet (2008) categorise sensemaking as shallow knowledge; a collaborative technique used to validate, organise, and interpret collective experiences. It is an ongoing, retrospective process that requires context in order to create situational awareness. In an organisational setting, shallow knowledge emerges through interactions as employees move through the processes and practices of the organisation. For example, organisations that embrace the use of teams and CoP's facilitate the mobilisation of knowledge and the creation of new ideas as individuals interact in those groups. The distinction between sensemaking and reflection is that, unlike reflection, sensemaking doesn't necessary lead to informed future action. Consequently, two participants expressed some doubts over whether informal and unstructured networks and CoP's can develop truly reflective practitioners:

I think a lot of people could tell you what reflection is, in fact loads of people at this club could tell you what reflection is, and they don't. I can see they don't because their coaching method might not have changed, they might have used the same warm up for the past fifteen years for example. I can tell that they're not reflecting. I think it's, fashionable, and looks good to talk about how much you're reflecting but I'm not convinced everyone reflects well (Participant B).

Participant L went on to suggest that informal and ad hoc processes can lead to a relative lack of accountability, with members unwilling to challenge each other's practice. According to him, this can limit a team's ability to reflect, leading to a lack of professional growth and informed future action to occur:

In an informal conversation with people you know who's reflecting on their work and who's not. Or who just brushes things under the carpet. So, I wonder, within our model at the football club, weather everyone understands it. In modern society, there's such a lack of want to take accountability for things, so if you don't want to take accountability, you're not going reflect on something because you're going be scared of the consequences or the outcome. We need to shift that to then drive better reflective practice. Why on earth is it not good to do a massive reflective piece...no blame culture, no one's at fault here, I just want to know what we

can improve. I want something to be done, I want something to change, something to happen. I'm very much a do-er, and I want an action or an end point. But we can't get to that because people, in my opinion, see a negative connotation to a reflective piece and are scared of the outcome. Whereas the outcome should be positive because it should enforce change.

4.2.4 Summary of communities of practice and informal support

The structure of communities of practice (CoP's) can vary greatly, ranging from voluntary informal networks to work-supported formal education sessions. For those individuals who lacked mentoring opportunities, CoP's were considered a major tool for the exchange of information, ideas, skills, and resources. Furthermore, those participants who were engaged in mentoring relationships considered there to be many positive benefits to CoP's. However, they generally regarded CoP's to be supplementary to their formal mentoring support rather than a replacement. The most common purported benefit that emerged from the data in respect to CoP's was the feeling of psychological safety that it promotes, creating a culture that supports collective sensemaking. Nevertheless, in order to reach the appropriate level of critical reflection in their discussions, participants revealed that a more formal structure for collaborative dialogue was required, along with a greater sense of clarity and understanding of what reflective practice is.

4.3 Levels of reflection

Interpretation of the research results continues to reveal that there is a continuum of reflective practice that ranges from 'technical rationality' to 'professional artistry' (Fish & Coles, 1998). Technical rationality is the theory that practitioners can solve practical problems through the simple application of scientific knowledge and techniques, thereby eliminating surprises in professional practice. Reflection is therefore considered a technical, instrumental, and linear process in which the knowledge that is acquired is concrete, objective, measurable, and explained in rational terms. This has largely been the dominant model of professional knowledge and practice (Attar et al., 2016). However, Schön (1987) argues that this systematic approach is inappropriate in the context of working life because an experienced practitioner's reactions are largely informed by tacit knowledge. He claims that practitioners become experts through professional artistry, acquired through reflecting upon and responding

reactively to experiences. This approach is not simple and predicable and requires the practitioner to make many complex decisions using professional judgements, intuition and common-sense. These activities are far messier and therefore more difficult to make visible, measure or teach. For Schön, reflection-in-action is the core of professional artistry.

When asked to reflect upon a critical incident, participants demonstrated different levels of reflective thinking, from superficial to more critical reflective analyses. Similarly, some participants' conceptions of reflective practice lay at the extreme ends of the continuum whereas others fell in between the two extremes.

4.3.1 The 'artistry' of coaching

The data revealed that, in contrast to other disciplines, coaching staff did not generally reflect beyond a descriptive level, re-counting the incident with some attempt to provide reason or justification, but in a reportive or descriptive way. This appeared to be because they viewed coaching as an art form, where real-time reflection and decision making is carried out simultaneously using "gut feeling." This intuition is a form of what Schön (1983) referred to as 'reflection-in-action' and acknowledges the tacit processes of thinking which accompany doing. This enables one to manage the process of learning, constantly adjusting and changing as new information is assimilated, a distinguishing feature of expert practitioners. Eraut (1994, p.145) argued that the ability to reflect and adapt as a situation unfolds can prove useful "when time is extremely short, decisions have to be rapid and the scope for reflection is extremely limited". Given the uncertain, dynamic, complex nature of the coaching process, it was perhaps unsurprising that reflection-in-action was at the core of coaches' 'professional artistry', particularly as they were experienced practitioners. Through their work, they are immersed in real-time flows of interaction and are required to elicit spontaneous responses to a variety of situations. Participant E mentioned that his reflection tended to occur within the moment and without preparation:

I'm probably more of an off-the-cuffer, if that makes sense.

Participant I suggested that his reflections were based on instinctive feeling rather than conscious reasoning:

It's interesting 'cos I haven't really got any terms or labels, I think it's just what I'm feeling in the session; what happens or what stands out.

Participant B goes on to describe this as intuition:

I work on intuition. I don't write anything down. That's always been how I've been at my best coaching-wise and that's how I prefer to reflect too. So, within the moment I'm constantly going "is this getting anywhere near the objective I want?". "Is the objective too easy?". And I've always been quite comfortable with that. I want to be feeling coaching, I want to be in the moment. There are so many variables that can come in, that I prefer coaching on intuition and reflecting within the moment with everything going around.

Schön (1983) states that it is inevitably difficult to ascribe words to representations of actions that may elude description. He maintains that the skilful practitioner is often unable to articulate or give adequate accounts of what they do for this reason. As such, reflection-in-action is often presented in the form of description (Powell, 1989). It was notable in the current study that coaches' critical incident reflections were largely descriptive, exhibiting a rather technical, narrow focus that was mostly centred around themselves. Consequently, there was relatively little analysis of their behaviours, thoughts, attitudes, emotions and motivations, failing to establish the "why?" behind them. For example, when asked to reflect on a critical incident, Participant I provided the following account:

It was quite challenging to begin with because, the sport scientist couldn't see where I was coming from. So, it was conversation after conversation after conversation, really trying to drum into him. And then eventually we got somewhere and his work, linked with what I was doing, took my programme and my philosophy to another level. And, you know it really made me think, if I'm going to produce goalies, it can't just be from me, we have to have a programme in place to tick all these boxes. And being an athlete for one was a massive plus, which was going to compliment my work. And the programme has now evolved massively since them talks. They were never heated, but I think it was more a case of reinforcing the message. And then trying to reflect on what was happening and what we could do to change it.
In the end, we both changed it, and I think since that moment, the goalies have been in a much better position. And not too soon after that conversation, we had two England goalies in the same group. So, the impact that had, was massive.

Whilst this has reference to a difficult and challenging situation, there is limited emotional expression and the role that any emotions may have had on any subsequent action is not explored. Similarly, the account is provided only from the point of view of the participant, with little consideration of the perspectives of others such as the sport scientist or the goalkeepers. As such, it is largely descriptive, and what little reflection there is, lacks any depth. It may however serve as a basis on which to scaffold upon, revisiting the same experience again to bring forth a deeper understanding and level of reflection.

Unlike medical practice that requires practitioners to engage in ongoing regular and robust reflection in order to maintain and improve their standard of practice, coaching staff are only required to provide a written evaluation of their coaching sessions on the Premier League's Performance Management Application (PMA). This was explained by Participant G:

I guess the reflection bit at the moment would just be session evaluations, which, after sessions, we have to put on PMA. So, you would write a few notes on how the session went. There's obviously a level of reflection there. And on match days, you'd reflect on the game and, again, do a report on that platform.

Participant C suggested that this may cause coaches to view reflection as a 'tick-box' exercise, whereby a fairly superficial and descriptive account is recorded but rarely revisited. Over time, this can cause the experience to be forgotten, failing to exploit any potential learning opportunities:

There's a potential for those reflections to go into the ether and never being nailed out.

When speaking about the current processes in place, Participant G reinforced this point by stating:

There's nothing further in place at the moment, which I think would be useful if there were. Otherwise we just sort of sweep it under the carpet and move on, hoping it will sort itself out. But I think if there was maybe a little reflection piece at a later point after an incident, it would be useful because you can then refer back to it can't you. Clearly that would have more impact on me moving forward and support my development should I experience a similar situation.

Providing coaches an opportunity to reflect on their reflections, a method which is advocated within reflective practice literature (Riley-Doucet & Wilson, 1997), will enable them to add further layers of depth and analysis to the learning experience, thereby constructing a deeper level of knowledge and understanding that guides actions in practice. Since the participants were asked to reflect on their reflections within the study, the research itself was in fact a reflective activity, prompting them to revisit their experience of a critical incident and further analysing it. One of the major barriers limiting the coaches' engagement in a more retrospective interrogation of their practice however was the time pressures associated with their roles. For example, Participant C stated:

It would be really useful to have reflective diaries and things, but it's the time aspect isn't it, that's the tough bit. How do you fit in? So, you spend time planning and preparing and delivering, and then by the time you've got chance to reflect on success, you're already planning and preparing for the next day or the next event, it's really difficult.

To counter this, many of the coaches said that they would reflect on the drive home, when no one's around and they are free to roam in our own minds. This was expressed by Participant B:

The method that I use the most isn't necessarily my preferred method but just works best timewise, and that is; I have a three hour round trip every day in the car, so that's where most of my reflection takes place. And I suppose this bit is planned, but I tend to at least once or twice in the week have a point on the drive where I switch everything off. Radio off, silence, and then I give myself chance to think about things. And if I don't do that, I can just get from A to B without thinking of anything, so I consciously will switch the radio off for a period.

Whilst it may be true that reflection comes most effortlessly, and in its purest and rawest form in such circumstances, reflection-on-action however is the opposite of multi-tasking. It requires a deliberate and purposeful turning inward of one's attention in order to engage in cognitive, goal-directed problem solving. Whilst coaches may have referred to this as reflection-on-action, it is perhaps more probable that they were engaged in other cognitive processes, such as rumination, going over a thought or a problem but without ever arriving at a conclusion as a result of having to respond simultaneously to multiple tasks or multiple task demands. Reflection after all is only metacognitive if you consciously reflect on what your thought processes were and how to improve upon them next time. As such, it is often problem-pondering rather than problem-solving. This distinction is important for practitioners to grasp when moving between outcome and process goals, and was brought to light by Participant E:

I need to have more time where I can do that (reflect) 'cos even though you're in the car, you can't do work can you... you're driving.

Participant G went on to emphasise this point, highlighting some of the distractions that can easily disrupt his reflections:

If I'm in the car, I'll reflect on the session probably for a couple minutes. I probably do that twice a week. So, on a Monday and Wednesday I have more time to go, "right, what happened tonight, was it good, what can I do differently next time?". Just general thoughts like that, again, nothing too structured. And again, just a couple of minutes probably. I think, generally, you come off the pitch knowing if you've got out what you wanted to, you sort of feel it a little bit as well, but it's more; "who got the most impact tonight and was that intended or did we miss something?", I guess those are the key bits. However, normally when you come away from the session, a parent or coach might want to have a conversation. That conversation takes a period of time. And then, rather than reflecting on the session on the way home, you're reflecting on the conversation. So, those little bits can come into it. You also sometimes get in the car and just ring the missus instead, or you know, you might have other things take care of. So those little bits would be barriers, I guess. You also have other priorities, you know, so as conversations crop up, you might have other bits of work. So, you're driving back and actually rather than reflecting on your session, the sessions gone, you might go well, ok, so you get on the phone quickly and speak to a couple of coaches or whoever it might be to get things sorted in your head for tomorrow.

In fact, the semi-structured interviews that were used as the method for data collection for the study were a welcome opportunity for many of the participants to engage in reflective activity. Participant H stated:

Funnily enough, as this conversation is going on, I feel like I am reflecting more and more. 'Cos it's that, time away from everything.

Similarly, Participant B suggested that by sharing his reflections he was able to draw new connections:

This is probably the first time I have spoken about it and tied the two together...I've enjoyed talking through it.

Whilst Participant D highlighted the importance of being asked thought provoking questions to prompt critical inquiry and self-reflection:

This conversation has been a good exercise. Playing it back and being asked some really good questions reinforces to me the value of questioning in challenging people to think more critically.

Therefore, for a methodological perspective, the method of in-depth interviews being conducted by an insider researcher was largely seen by the participants as an opportunity to engage in social and collaborative reflection with a knowledgeable peer. The perceived benefit of this would suggest that more time should be afforded for coaches to engage in such activities, uncovering the knowledge used in practical situations by analysing and interpreting the information recalled (Fitzgerald, 1994). This two-part process or dual staged reflection (Knowles et al., 2001), which involves the use of both types of reflection on the same event, has the potential to help coaches to deepen their reflection to levels from which greater value will develop.

4.3.2 Summary of the 'artistry' of coaching

Due to the increasing demands placed on their time, many coaches find it extremely challenging to reflect in a structured and effective way. Many coaches experience this difficulty in their coaching practice, in which the business of practical duties overwhelms the intention to spend time in reflective thought, thus promoting the view that reflection is an extra, rather than integral, part of development. It was evident from the research that whilst coaches may occasionally embrace more formalised, structured approaches to reflection, they are more likely to use an intuitive approach that is fluid and tacit in nature. According to criteria identified by Nash and Sproule (2009), all of the coaches that participated in the research would be considered experts having acquired 10+ years of experience. It can be reasoned that expert coach should be given the freedom to reflect on his or her own style and thus cultivate professional artistry, which is particularly essential if they have managerial duties (Vallance, 2019). However, in some situations, more than one approach may be needed. It is therefore important for coaches to possess the understanding, skills and awareness in order to apply the most appropriate approach according to the particular situation. For coaches to become what Snow (1998) defines as 'spiral thinkers', they must develop a dual approach of reflection-on-action and reflection-in-action to foster wider critical thinking skills. However, busy and over-stretched coaches are likely to find reflective practice taxing and difficult and are therefore unlikely to engage in retrospection which they may perceive as time consuming and unrealistic in their pressurised work context. As such, coaches should be afforded adequate support, time, resources, opportunities, and tools for reflection, stepping out of the situation when necessary in order to reflect retrospectively.

4.3.3 Analytical leaders

In contrast, staff who occupied more senior roles within the Academy Management Team and were responsible for administrative, operational and logistical tasks, tended to engage more in retrospective reflection-on-action, reflecting on the event afterwards in order to deal with their emotions and bridge the gap between practice and knowledge (Knowles et al., 2006). Van Manen (1990) states that in order to achieve real selfreflection, one needs to step out of the situation and reflect retrospectively. Participant D describes the need to create adequate time and space for him to reflect optimally: My preference wouldn't be to have to operate within the messy chaotic space. We have the facilities to be able to video stuff and reflect on the moments when we move into more complex or messy discussions. I playback these conversations or meetings I've gone to in order to actively seek and think about what I might do differently or what I might need to maintain...what worked well.

For Participant D, this was particularly true when faced with having to make a difficult decision. In such situations he would pause, step back from the action and reflect deliberately and conscientiously, involving others in the decision-making process:

In this particular situation, I knew the importance of the decision and was comfortable to go "I'm listen to what everyone's saying and I'm stuck". Which might sound like quite minor thing, but it feels like quite a liberating thing when everyone's going, "so what's the answer?". "I don't know but, I'll play back what I've heard, and then let's try and formulate an answer".

Whilst coaches tended to apply a fairly fast, automatic and intuitive approach to reflection, which may impair the depth and quality of their thoughts, these individuals were more inclined to apply conscious effort in order to systematically re-examine an event. This however requires a great deal of time, space and energy to close the loop between reflection and positive change. This is particularly true if the situation is complex, not well defined, and lacks a clear solution and approach. This could sometimes cause them to dwell on what happened, finding it difficult to 'switch off' when they left work. This was something that Participant C identified with:

I probably spend far too long a period of time reflecting on what I've done and how I'd done it, instead of maybe moving on. If I'm having a conversation with myself on more than one occasion, then I'm starting to dwell on it. And quite clearly, if I'm having it on more than one occasion, I haven't dealt with it in my own mind and I'm probably not ready to move on to solve the situation that I'm considering.

Participant L suggested that he too would get caught up in overthinking situations, finding it difficult to move forward:

I'm constantly thinking about what I'm doing. Like, all the time. I don't sleep at night. I'll wake up in the middle of the night and I'll be thinking, and something about work or something about a player or something about football will come into my head. Because I literally don't switch off. If I don't close the loop on a reflective piece, I'm constantly thinking about it.

This was particularly true of negative incidents, as participants tended to dwell on things that do not go well even if something positive is equally or more present. In fact, all of the participants chose to reflect upon a negative critical incident, demonstrating an inclination to attend to, learn from, and use negative information far more than positive information. In fact, research by Obayashi et al. (2018) found that the reflection of practitioners was significantly deeper for negative events as this was associated with critical reflections, whereas the reflections on positive events were likely to be reflected in a shallow manner. This is known as positive-negative asymmetry or the negativity bias and can lead to reflect on experiences that went wrong:

I personally respond well to reflection if there is a negative connotation to it, whereby I know that I have to make an improvement. I think the reflection has to have an action point or an end point, so it easy, if when you reflect you can go "what could have gone better?". "This, this and this". "Okay let's action it.". Whilst the connotation is negative, the outcome should be positive because it enforces change.

Participant K stated that he often fails to reflect on positive experiences or events as his inclination is to prioritise negative ones:

You probably haven't got time to celebrate all the positives straightaway, whereas you don't want negatives to linger. So, it's a case of highlighting any negative elements and doing something about them straightaway. I probably don't celebrate or recognise as many positive as I probably should.

Whilst reflecting on negative experiences is not a barrier to reflection per se, it may be a barrier to a 'rounded' reflective experience (Knowles et al., 2006). As such, practitioners should be encouraged to reflect on both positive and negative experiences. This study however is consistent with Knowles et al.'s (2006) research in that, when asked to reflect on a critical incident, all of the participants chose a negative event or experience. This 'negative focus' demonstrates an inability / failure to reflect on positives, focusing on the outcome rather than the process. By being almost exclusively concerned with the outcome of the act of reflection, practitioners may only attain a very narrow and restricted form of reflection, neglecting the process through which deep and rich learning takes place. For practitioners to get full value from the reflective experience, it's important to focus on the process of reflection rather than just past negative experiences and uncertain future outcomes.

Those participants who reflected more deeply and analytically demonstrated an understanding of how emotion affects the quality of their reflection. They also displayed a practical ability to manage personal emotional processes in relation to the subject matter of the reflection. They allowed space for their feelings to be explored, becoming more aware of how emotion impinges on their decision-making and subsequent action. Participant F discussed the awareness of his emotions and the information that they convey to him:

I've always found it really useful trying to be aware of how I feel about something. Like, why am I feeling so churned up about this? Or why does it make me feel so happy? Or why does it make me feel so conflicted or confident? I try to be quite aware of that in the moment, and then having a period of time where I might reflect on it. If it's more significant, emotive or I grade as more important, I'm often more aware about my feelings and may strategically try and park it and give myself time to process it. Whereas if it is more trivial and evokes a lesser reaction, I'll treat it with more immediacy. Again, it's something that my mum would have always said to me; "sleep on it", you know. You don't realise it but that's actually a reflective model in itself.

Whilst emotion is often a precursor to change (Fook & Gardner, 2007) and central to the process of reflection, it is frequently neglected (e.g. Boud, Keogh & Walker, 1985). The current rationalistic approach of coach education for example encourages individuals towards a more conservative, less emotionally laden approach which may unwittingly convey that emotions are too messy, unhelpful, unimportant and uncomfortable. Emotion has therefore been treated with caution in the coaching field, typically characterising coaches and coach educators as rational, calculating, and

dispassionate individuals who are somehow free from the constraints generated by their emotions (Potrac et al., 2013). This may go some way to explain the exclusion of emotion in the coaches' reflections relative to individuals in other disciplines within the Academy Management Team. Where emotion is denied or suppressed, it is unlikely to deliver the reflective and transformative learning as characterised by the deepest levels in Jenny Moon's (1999) Model of Reflection (Brockbank et al., 2002). Those participants who have perhaps followed different professional development pathways and operate at management level or other functional disciplines, were more willing to discuss the emotional aspects of their reflections and acknowledged how reflective processes are deeply emotional.

4.3.4 Summary of analytical leaders

According to research by Davut Goker and Bozkus (2017), effective leaders reflect on their past experiences and search for relevant, different insights before the decisionmaking process. It was evident from this MRes study that participants who held operational and strategic leadership roles within the Academy Management Team (AMT) were more inclined to retrospectively reflect-on-action in a structured manner in order to uncover knowledge by analysing and interpreting the information they recalled. It is inferred that this may be a consequence of managing a more substantial amount of information, managing or coordinating a range of different team members and / or disciplines. As such, in-action reflection would potentially add to this load and may not be considered a priority. Furthermore, as their roles are concerned more with longterm strategic planning and operational management, they are perhaps detached from the day-to-day work tasks or activities that immerse other practitioners. Instead, they are able to maintain a certain distance from the actions that they are involved in, taking time to engage in more structured and in-depth thinking. They may however need support in developing reflection-in-action skills, particularly when faced with complex 'wicked' problems that lack clarity in both their aims and solutions and are subject to real-world constraints which hinder risk-free attempts to find a solution. In such situations, they may be required to 'think on their feet' and deal with the uncertainties of practice in creative ways, often with limited time.

4.3.5 Adaptive experts

It was evident from the research participants, however, particularly the sport science and medical staff, that they were flexible in their use of reflection, adapting the level according to the specific context of the situation and the background experiences that the individual bought to the episode. They would decide what level of reflection was appropriate at a point in time, moving back and forth between the levels. This indicated a higher level of maturity and sophistication when reflecting. This is perhaps unsurprising given that the benefit and importance of reflective practice is wellestablished within the health professions (e.g. medicine, nursing), placing reflection as a central part within their education and training programmes (Mann et al. 2009). As such, these practitioners demonstrated high levels of situational awareness and adaptive expertise, adopting methods and levels of reflection that complemented the situation that they faced. Participant L:

I think it's all completely different and changes according to the scenario and piece you're trying to reflect on. If it's a reflection on general practice, I don't tend to do it instantly. There's almost a period of reflection maybe every two or four weeks with members of staff, and that might be whatever it needs to be; "What's going on?". "How's it working?". "Can we reflect on it?". I will then send back notes and minutes from that reflective piece which leads to another one two weeks later because it's a long-term project. We sort of reinforce it as we go along. And then, as I'm writing it, the reflection notes are changing and I'm getting more questions. That's what I find really interesting; I'm writing it up, and they're writing up, and we might have two completely different stories at the end of it. But then, I will reflect on what they've given me and come up with more questions. So, it's almost an everevolving process I think, it'll just keep curtailing on reflection on reflection on reflection, to drive us to delve in a little bit deeper and ultimately come up with an outcome that we're trying to achieve. I'm very aware however that we might not always close the loop and maybe that's something that effects or doesn't make the reflections as powerful as they can be. I'm very comfortable, however, with parking it if I feel the reflection has gone in deep enough and we've got enough of those layers.

Conversely, if it was a critical incident or significant event analysis, and maybe we're being criticised for it, almost straightaway you'd go into an internal, self-reflective period. You'd maybe then want to come together and do a group analysis. My personal opinion would be if it's a critical incident, you'd want to have done a decent group reflective camp within forty-eight to seventy-two hours while everything's quite fresh in your mind. You then might want to revisit that a couple of weeks later and then reinforce; "okay this is what you said seventy-two hours past the incident, that's fairly emotionally driven still, but the emotion's gone now, we've done the first part, has anything else crept in your mind?".

If it's an emergency aid situation that we're reflecting on it, it'll be a fortyfive-minute meeting, done, closed.

These statements indicate that the individual is able to apply the key principles of a range of different reflective practice methods, which they deem to be appropriate and effective according to the context and type of thinking task. This may be immediate or deferred (Clegg, Tan, & Saeidi, 2002), individual or collaborative (Donovan et al., 1999; Linn, 2000), deep or superficial (Moon, 2001), written, spoken or pictorial (Owen and Fletcher, 2020). The ability to apply different reflective practice methods and approaches implies a capacity to execute conscious control of one's thinking through metacognition, ensuring that they are able to operate more effectively in potentially diverse and demanding situations. Tsangaridou and O'Sullivan (1994) recommend that all areas of reflection; technical, practical, and critical are considered and not placed in a hierarchical order. Technical reflection refers to concerns with standards, competencies and the development of mechanical aspects of practice, whilst practical reflection involves the practitioner being concerned with exploring personal meaning. Critical reflection involves coaches being concerned with examining the constraints that social, political and economic factors have on action. Whilst the level of reflectivity should depend on the context and situation, i.e. certain situations may only require a technical level of reflection; it was of particular interest that none of the participants exhibited critical practice.

Adaptive expertise involves the coordinated use of conceptual (theoretical or professional) and procedural (tacit or experiential) knowledge. According to Saury and Durand (1998) effective elite sports practitioners use both to combine aspects of

artistry and science when performing their professional practice. Furthermore, adaptive experts use their understanding of the conceptual context in order to make an informed decision about the relevance and utility of a particular strategy. It is a much more flexible and often creative form of reasoning that allows this sort of expert to select appropriate courses of action, modify those actions if they turn out to not satisfy their intention, and possibly even invent new strategies in the face of novel problems (Gouvea et al., 2013). This idea is similar to what Ford and Forman (2006, p. 3) have described as a "grasp of practice." This is a skill that has no doubt been acquired through a complex process influenced by a wide variety of internal and external factors such as education and training, applied and experiential learning, organisational culture and personality traits. Participant D for example is a former semi-professional footballer who has obtained a PhD and worked for the club in various capacities for six seasons, before which he was as a performance coach and lifestyle adviser for the English Institute of Sport, working across a range of different sports and disciplines. Furthermore, according to the DISC Model (Marston, 1928), an inventory that the club use to classify employees' personality and behavioural styles whilst supporting them in learning more about themselves, Participant D was determined to have a C-style profile. This is the most logical and systematic of the four DISC profiles and is associated with careful, analytical problem solvers who enjoy processes and structures.

It is interesting to note, however, that those participants who elicited adaptive skills in their reflective practice had all completed an Undergraduate degree, Postgraduate Certificate in Education (PGCE), Master's degree or Doctoral degree in a higher education programme. Reflective learning activities were formally introduced in these programmes as a way of promoting reflection and increasing the students' capacity to learn. However, the way in which reflection was introduced to them on these programmes often led them to perceive the concept as boring, difficult, unnecessary and unimportant, often lacking the necessary skills and motivation to deal with such a topic. There is perhaps an overreliance on or formulaic use of frameworks that would limit creativity and responsiveness on the part of the learner. Whilst reflection offers an opportunity for innovation, creativity and immediate relevance emerging directly from individual experience, it is potentially bounded and constrained by models and frameworks which may be judged as being 'effective' in the light of predetermined criteria (Rolfe, 2002). Imposing a model on reflection could run counter to the spirit in which it is used although using reflection mindfully with intentionality would potentially

counter any 'dangers' of conflating models and framework. Rather, conceptual frameworks would be most effective when used in a careful and reflexive manner, including an acknowledgment of their intended purpose and inherent limitations. Johns (2009) acknowledged that the benefits of reflective practice cannot be taught – they have to be experienced and this was acknowledged by Participant J:

On my PGCE I learned a lot about reflecting. I'm sure we did a good sixweek block on reflection, understanding how to evaluate of our lesson plans. We went through three different models and had to use them to reflect on a different lesson. I think we did at least six to nine lessons in which you did three different reflection models on. The most important one was the observation, where the tutor came in to observe and would then work through the reflective model with you afterwards. The other ones weren't observed, but you had to write your reflections down and bring them in, talking about them with the group; how you used that model, what was good about it, so on and so forth. Whilst the models were important, they broke everything down into; think like this, then think like that, then think like that, which isn't my way of doing things at all. I prefer to just let it go free and hopefully I'll come up with the best thing. But I suppose that process allowed me to become more, unconsciously competent; talking about it that much ingrained it into my head a little bit more. I remember thinking at the time, this is annoying, but it shows you how things that are annoying also make you realise over time, how important they are. I wouldn't be able to tell you what Gibbs' Reflective Cycle is now for example, but I spend a lot of time reflecting.

This was reinforced by another view in which Participant L said:

I was probably taught reflection at undergrad and probably again at MSc. I couldn't remember it, however. I probably didn't see the benefit because it was probably part of one of these, um, research in sport modules or culture in sport modules, whatever it would have been back in those days. You would have just got taught it as a process, which was the Gibbs Reflective Cycle. I don't like a process, I like free balling, you know free flowing and the ability to think, but I guess reflective skills develop as you develop in the role, as you're going along, particularly as a practitioner. Like, in my opinion

now, you cannot be a good practitioner if you don't reflect, but I didn't know I was formally doing reflective practice until I got into this role.

Research by Knowles et al. (2006, p. 175) discusses the factors influencing reflective practice and how "reflective practice seems to be influenced by extrinsic factors such as coach status and role responsibility, rather than it being intrinsically perceived as an essential component of good professional practice". In the same way, Participant L didn't see the value of engaging in reflective practice when it was presented to him through formal education programmes. Instead it was his role and responsibilities within the workplace that prompted him to reflect.

Whilst models of reflection are frameworks that can be used to help structure one's reflections, research has shown that they may not taught effectively (Choy and Oo, 2012). These statements would certainly support the view that there is a lack of balance in the way that reflection is taught in formal educational settings, where theoretical detail and explanation is provided but without sufficient application to realworld settings, and a lack of flexibility to meet the individuals' personal context. This means that they are often viewed as being overly prescriptive, rigid, and non-inclusive. Fortunately, through work-based experiential learning, these practitioners began to value the relevance and importance of reflection on their practice, taking an actively engaged role in developing and applying their reflective skills. They began to understand reflection as a transformational learning process as opposed to viewing it as a transactional "box-ticking exercise". Instead of using one specific model however, they tended to take the bits they liked from several different models (see Figure 13 for an example), developing their own conceptual framework in order to overcome what they perceived to be the limitations of any single model. This is also consistent with the research by Knowles et al. (2001), which found that coaches were inclined to adapt their own reflective models and processes in order to overcome the barrier of time. As such, they appeared to be revisiting the role that reflection now plays in their practice, with little continued and consistent use of a particular reflective model, instead adapting multiple models to meet their own needs and preferences. Reflection is still stated as being "done" and considered an important part of ongoing practice, but "looks" very different from the academic models that would have been introduced through graduate level education or coach education workshops. They are therefore moving away from a standardised, 'one size fits all' approach, towards a more personalised and individual approach to reflective practice. Whilst this may give their reflections a functional

capability, incorporating the technical and practical levels, it is perhaps less effective in achieving 'critical' levels of reflection in relation to the social, political and economic context of their work. Participant F describes how he has modified various models and frameworks to create his own:

I've been exposed to a number of different reflective models. I think the one I always, come back to, because it's simple in my mind, is the What? So what? Now what?. So, I will try and think what's just happened, is it even worth thinking about, what does it mean to me and what action should I take from it? And then I use the Gibbs Reflective Cycle, which more explicitly focuses on the feelings I might have, attaching emotion to it. So, I think I've probably embedded that into the model I use. Another one of the models that is layered in is the Ten Ten Ten model, which I think was probably something I was doing naturally. The ten minutes is your natural reaction to something that's just happened, that instinctive moment of going, what's just happened? What did I feel about that? Then you almost let it simmer for a period of ten-hours. And then there's the slightly cooler response ten days later. The other one is the Optimal Performance Framework or four A's model, which I genuinely believe is a lovely model and whether people are aware or not, is ultimately a kind of reflective model. It looks at assessing what has occurred, but I guess the really important part of it is the acceptance piece, which probably doesn't occur as overtly in the other reflective models that I use. But it's definitely something I would encourage others to do; you've just got to accept what has just happened and embrace it because otherwise I think you can get caught up and not move past it. The adapt and apply bit is almost the So what? Now what? piece isn't it.

Figure 13 provides an illustration of the model the Participant F has created. It is a cyclical model that puts focus on repeated experiences. There is first an immediate reflection after the experience that allows him to capture 'hot feelings'. This generally takes place within 10-minutes and enables him to assess the emotions and feelings attached to that experience, attempting to 'make sense' or find the meaning in it. Then follows a 'standing back' from the emotions which may cloud his judgment and influence his decision making. This allows him to explore his thoughts, assumptions and gaps in knowledge as part of the problemsolving process. The experience is revisited approximately 10 hours later, enabling him to re-assess, re-evaluate and re-analyse the experience, rendering another layer of reflection. The cycle is then repeated 10 days later with the aim of achieving a level of reflection beyond what had been previously achieved. The intention is to gain further insights, drawing conclusions and committing to taking action in order to close the loop.



Figure 13: An illustration of the reflective model used and adapted by Participant F

This Optimal Performance Framework (Figure 14) has been created by Club's sports psychology department and is a flexible and adaptive overarching model that may be applied across a broad range of disciplines, reducing noise within the system, both physically and emotionally, helping individuals to achieve their optimal level in their own unique way.



1.

2. ACCEPT:

Acceptance means opening up and making room for the full range of thoughts, feelings and sensations that are a natural part of football, both positive and negative ones. When you learn to accept and open up, it is easier to let feelings come and go without draining your energy or holding you back.

3. ADAPT:

Being able to adjust to the new information that is presented to us provides us with the ability to make informed choices of how we utilise the resources at our disposal in order to achieve the desired goal.

Figure 14: Optimal Performance Framework

The participants who demonstrated adaptive expertise and deeper levels of reflection all explained the importance of this model in their reflective practice, whilst also suggesting a need for greater awareness in promoting the use and potential benefits of the model. Participant L stated:

I am driving the four A's model across the department, but I haven't done it to the degree or speed that I wanted to do. But that's because it's a new model for me and not everyone understands it. So that's probably where the sticking point is now; people need a better understanding of how they can relate it. I want to use the four A's model to underpin our reflective practice and really go into the nooks and crannies, and I think it lends itself well to those situations. It might not work for everyone, but that's where I think the four A's is really pivotal.

Participant J suggested that the members of staff who work closely with or are more aligned with the department who created the model, benefit from sharing information and asking questions and are therefore much more likely to use and embed it in their practice. However, effective dissemination of this information in order to enhance the impact and reach of the model, encourage staff engagement and increase their ability to use and apply it appears to be lacking:

I think it's the people that are more in touch with the psychology department that use the four A's model. I think that's important though, because most of the people that do are normally leaders of their department or their phase or whatever, which can only help in terms of progressing it through to others. I think if I ask my staff, "do you really use it?", I don't think they'd say yes. I know that the physio staff have implemented it into their reflective practice in terms of their evaluations, which I think is really powerful for reflection actually.

Dissemination methods should be considered because those who demonstrated a more superficial surface approach were either unaware of the Optimal Performance Framework, or simply didn't use it. For example, Participant H said:

There's the three A's, four A's. I don't know what they are. Four A's because I can see the model. Um, accept, assess, apply are the ones that come to my head. But again, that's not something I use for my personal reasons, it's things I've seen them use with the players. But that's not for me personally something I've used.

When asked if the club had a model or framework for supporting staff reflection, Participant C said:

I should know that shouldn't I. Um, no, not that I'm aware of, I don't think we do have a model that is promoted among the staff here, that'd be the honest answer.

4.3.6 Summary of adaptive experts

According to the literature, there is a strong and deep connection between the concepts of critical thinking, reflective practice and adaptive expertise (Hicks & Bumbaco, 2014). Adaptive experts are likely to use multiple perspectives and metacognition, possessing strong procedural and conceptual knowledge, as well as a disposition toward more rigorous learning (Hatamo, 1982; Fisher & Peterson, 2001). They are therefore able to utilise their understanding to flexibly adapt mental models, approaches, and methods to new and varied situations. This was evident, particularly among practitioners in sport science and medical disciplines, perhaps because reflection is widely regarded as an

essential aspect of the education pathways for these professions. These individuals are also more accustomed to working with members of other disciplines in a multidisciplinary manner in comparison to coaches who seemingly conceptualised their work as more of an individual endeavour, failing to value the importance of perspective taking. For example, coaches didn't explicitly consider their attendance at multidisciplinary team meetings as an opportunity to reflect. This points towards the psychologism and individualism that Cushion (2018) discusses as being embedded in ideas of 'reflective practice' and 'the reflective coach'. Reflection has been co-opted by these disciplines as a personal and individual endeavour rather than a communal way of learning, dismissing the reality of knowledge being socially and cultural constructed, shaped by multiple external forces, requiring (despite the best laid plans) often high uncertainty and ambiguity in decision making and action. Unfortunately, this, along with time constraints within the workplace environment, may lead to preferential adoption of procedural knowledge over conceptual knowledge among coaches, significantly hindering the development of adaptive expertise.

Adaptive experts from sport science and medical backgrounds were able to apply different techniques and methods of reflection, modifying and adapting themselves and their approaches according to different practice contexts and situations. This enabled them to analyse a situation from different perspectives, viewing their practice through different lenses and moving through the levels of reflection as appropriate. They engaged in individual and collective reflection, reflecting in-action, which was later followed by periods of on-action reflection if necessary, to further analyse their on-the-spot experimenting. This was then recorded and documented in order to aid their learning and identify opportunities to improve. Whilst time pressures were again cited as a constraint, this was almost accepted given that reflection was regarded to be an essential part of their personal and professional development. The challenge is then how they share this best practice and draw upon it in order to support other practitioners to develop a critical understanding of their own practice, embedding it within the multiple contexts within a professional football academy's practice.

Chapter 5 – Conclusions and Recommendations

5.1 Introduction

This chapter concludes the study by summarising the main research findings, conclusions, limitations, and recommendations for future research. The primary aim of the study is to examine the extent to which a team of multidisciplinary practitioners within an elite English football academy actively engage in critical reflection as part of their everyday practice. The study sought to do this by addressing the following objectives:

- To identify how organisational culture and other internal and external contextual factors may influence individual and group behaviour and attitudes towards reflective practice.
- Active engagement in reflective practice was encouraged throughout the club in a range of different forms from mentoring and Continuous Professional Development (CPD) opportunities, to the development of an Optimal Performance Framework aimed to support staff reflection. However, whilst reflection was being "done" and considered an important part of ongoing practice, it "looked" very different across the research participants.
- 2. Assess both the type and level of reflection that practitioners engage in using a critical incident analysis task.
- The different disciplines working within a multidisciplinary team engaged in reflection to varying depths and levels. Participants who occupied more senior roles within the Academy Management Team and were responsible for administrative, operational, and logistical tasks, tended to engage reasonably deep, retrospective reflection-on-action. By contrast, coaching staff tended to reflect-in-action at a rather descriptive level, re-counting the incident with some attempt to provide reason or justification, but in a reportive or descriptive way. Conversely, sport science and medical staff were flexible in their use of reflection, adapting the type and level according to the specific context of the situation and the background experiences that the individual bought to the episode. They would decide what level of reflection was appropriate at a point

in time, moving back and forth between the levels. It was of particular interest however that none of the participants exhibited levels of critical reflection.

- Explore the barriers and ascertain what support and changes may be required to promote the embeddedness of reflective practice within an elite English football academy.
- The participants reported several perceived barriers to reflection which could be grouped into specific categories:
 - o The environment this related to the uncertain, complex, and often ambiguous nature of workplace environment which often presented unforeseen challenges preventing them from engaging meaningfully in reflection. Additionally, some participants worked remotely or didn't have a direct line manager which led them to feel isolated from their peers and unable to engage in collaborative and dialogic reflection. Some also cited the constant influx of information and 'noise' which often causes distraction.
 - The task this included work-related barriers such as time pressure and workload, factors which reduce performance in all tasks including reflective practice. The participants' knowledge, understanding and experience of reflection and its complexity would also prevent or impede their engagement.
 - o Personal this related to the participants' work-family-life balance, ensuring that they maintained commitments to family and friends, and attended to hobbies and interests. This was important to ensure that they felt re-energised and refocused as the engagement in reflection required an investment of physical, cognitive, and emotional energy. Cognitive bias was also seen to be a barrier which may impact on the capacity to reflect effectively and meaningfully.
- 4. Qualitatively investigate current multidisciplinary team (MDT) practices using semi-structured interviews.
- Semi-structured in-depth interviews were carried out in order to collect openended data and explore participants thoughts, feelings and beliefs in relation to reflective practice. A critical incident analysis task was also used to encourage participants to engage in an episode of reflective activity. This is a method that has been used in a range of professional disciplines including nursing (Burgum and Bridge, 1997; Parker, Webb and D'Souza, 1995), education (Kuit et al.,

2001) and social work (Mills and Vine, 1990), but has been largely overlooked within sporting contexts. The study revealed that critical incident analysis is a promising tool in structuring and aiding reflection, and has the potential to form learning processes and developmental pathways. For example, some participants suggested that by sharing their reflections they were able to draw new connections, highlighting the importance of being asked thought provoking questions to prompt critical inquiry and self-reflection. This hopes to demonstrate and validate the usage of the critical incident technique as part of an open and flexible semi-structured interview data collection method, which may be employed in future research.

- 5. Provide recommendations for future multidisciplinary team (MDT) implementation within an elite English football academy environment.
- The adaptation of an MDT approach is a standard requirement under the auspices of the Elite Player Performance Plan (EPPP) as a means to enable practitioners to collaborate successfully with the primary purpose of providing player-centred holistic support to each academy player. However, there has been no clear directions or guidance on how to apply the principles of this approach in order to achieve successful joint working and attain this overarching aim. Given that reflection has been shown to promote teamwork understanding, collaboration and synergy in a number of contexts (e.g. Hirsch & McKenna, 2008), it should be seen as a crucial skill to enable practitioners to learn from past experiences, putting what's been learned into practice in order to strengthen their MDT approach in future (Jasper, 2006). The recommendations for adopting and optimising a reflective team approach that arise from this study are:
 - Recognise and remove individual barriers in order to facilitate reflection, supporting practitioners to become more confident, experienced and skilled in their approaches to reflective practice.
 - Embed a mentoring community of practice within the workplace in order to stimulate reflective dialogue around current practice, promoting learning and collaboration across organisations.
 - Ensure sufficient time is provided for MDTs to share best practice, undertake supported learning and skill development, including opportunities for reflection. How MDT meetings (MDTM's) are structured, organised and coordinated is also important, ensuring that a strengths-based approach is applied when facilitating the

engagement of reflective practice. For example, when reflecting on a 'wicked problem' (Rittel & Webber, 1973), which is likely to require high degrees of both collaboration and of learning on the part of all concerned, the medicine and performance practitioners (i.e., physiotherapists, doctors, sports therapists, scientists) who have demonstrated adaptive expertise and deeper levels of critical thinking in the study may lead / chair the MDTM. Conversely, when less time is required to frame and solve more simplistic problems, the creative intuition of coaches may be more appropriate. Put simply, organisations should consider the adoption of more flexible and dynamic MDTM working arrangements.

o Provide contextualised, individualised and fully mapped out continuous professional development (CPD) to practitioners to enable them to hone and develop their reflective skills. Using the example above, whilst intuition can be an extremely valuable tool for decision making in some scenarios, it can be disadvantageous in others where sensemaking and critical thinking are required. By building in periodic, structured opportunities for this individual to produce deeper reflections and integrate subsequent learning into their practice (Kuh, O'Donnell & Reed, 2013), it has the potential to support them in becoming a more multifaceted reflective practitioner.

The main findings from the study indicate that 1) There is a disconnect between the understanding and learning of reflective practice through coach education courses and its application within the real world. 2) Reflective practice should be nurtured and developed through strong networks and interprofessional collaboration, utilising communities of practice and mentoring relationships both in and outside the work environment. 3) The different disciplines working within a multidisciplinary team will engage in reflection to varying depths and levels. Rather than viewing reflection on a hierarchical scale, the level and method of reflection should be determined by the individual, their experiences, and the context. Not all incidents require in-depth reflections, but support should be provided to practitioners to enable them to effectively assess how and when to move between different depths of reflection as appropriate.

5.2 Implications

The possible impact and implications of this research is the valuable contribution it has to our understanding of reflective practice is applied by multidisciplinary teams in realworld contexts. It supports existing research on the important role mentors (Jones et al., 2009) and communities of practice (Nelson & Cushion, 2006) can play by facilitating the engagement in reflective practice. It also concurs with previous research by Knowles et al. (2007) that found no evidence of practitioners reflecting at a critical level, demonstrating a concerned with examining the constraints that social, political and economic factors have on their action. In order to promote, facilitate and develop higher-order critical thinking and reflection skills issues currently preventing this may need to be explored further. Finally, this research questions the notion that the levels of reflection should be seen as hierarchical, as this implies that one moves progressively and sequentially through the levels, therefore technical and practical reflection will ultimately be surpassed by critical reflection. In some situations, only a technical level of reflection, which is concerned with the efficiency and effectiveness of means to achieve certain ends, is required. However, by arranging the levels hierarchically, this devalues technical skill which is equally important depending on the context. By displaying the levels as a flat hierarchy, it may address the above point and assist in developing critically reflective practitioners, whilst it will also empower the practitioner to select the most appropriate level at the right time for the right situation, rather than thinking 'higher is best'. Overall, this research could influence the existing practices of football academies in order to utilise reflective practice more effectively, along with subsequent implications for future coach education programmes.

5.3 Limitations of the study

Undoubtedly there are some limitations to the study due to constraints on the research design and / or methodology which may have an impact upon the findings. The three main limitations of the study are expressed as:

 The first limitation concerns the selection of conducting semi-structured, indepth interviews under an interpretive research paradigm. The subjective nature of this approach along with the research findings having been obtained from one setting, may make it difficult to reach a valid and generalising conclusion in comparison to more positivistic designs. Temporal and contextual boundaries may also limit generalisability and transferability. Whilst the data provides some comprehension of how reflective practice is currently being applied within the work of a multidisciplinary team right now, as well as an insight into how things used to be and how they might become, it is perhaps specific only to the club and the sample population used. It cannot be assumed therefore that the findings from this study will be the same for every other member of the target population and that they can simply be transferred to another context. For example, not all coaches will exhibit a preference or predisposition towards descriptive in-action reflection, whilst equally, not all senior members of an Academy Management Team will predominantly apply retrospective reflectionon-action to explore an experience. Yet the pervasive roots of culture and tradition run deep in football, leading to the development of a habitus, which may mean that the data is in fact applicable across many different clubs and multidisciplinary teams.

- The second limitation relates to the size of the sample and the variance within the population, which may further threaten the generalisability of the study and its representativeness. The sample consisted of only twelve participants, all of which were White British males between the age of 30-45. This was therefore not representative of the entire population in areas such as age, gender, and ethnicity. Whilst there has thus far been a lack of any robust data collection examining the demographic diversity of coaches working within elite youth academy settings, this sample clearly has the potential to reduce the external validity of the study given that the findings cannot be extrapolated to the population as a whole. Unfortunately, there is a lack of representation and opportunities for Black, Asian and Minority Ethnic (BAME) and female coaches within football. However, The Football Association's Football Leadership Diversity Code (2020) has recently been established to drive diversity and inclusion at all levels across the English game. Future research exploring minority communities would therefore be advisable.
- The third limitation is the researcher's own situatedness within the research, which may inadvertently lead to insider bias due to the subjective nature of researching one's own practice. In an of itself, this may be a source of insight due to the richness, honesty, fidelity and authenticity of the information acquired which has the potential to make a difference to a work-based situation in which the researcher has an invested interest. However, the researcher's insider

status and 'closeness' to the participants may compromise their ability to engage critically with the data, further compromising the reliability and validity of the research. This raised unique challenges and required the researcher to negotiate their own positionality and inherent bias, ensuring that sufficient steps had been taken to guard against it. There were also some moral and ethical decisions around what information to disclose and what information to take out, which could have an impact when returning to work once the study was complete. Whilst the researcher was able to reduce the chance of their biases affecting the research, the potential for 'informant bias' still exists. Specifically, what the participants were willing to share in the interviews may have been influenced by how the researcher is perceived and their relationships with the researcher outside of the research context (Dwyer & Buckle, 2009). Participants may be willing and comfortable to share detailed or personal information and to discuss issues with someone who 'understands'. Equally, they may not share certain information for fear of being judged, or the impact on their ongoing relationships (Chavez, 2008; Mercer, 2007). Whilst it is acknowledged that no research is free of the possibilities of bias, due to the nature of the insider research method in qualitative research, bias is more likely to occur in this form of research.

5.4 Recommendations for future research

Based on these findings the following recommendations for future research and practice are made:

• More research is required into the applied reflective practices of multidisciplinary teams in sporting settings. Whilst there is a growing body of knowledge in relation to the reflective practices of sports coaches, there is a paucity of literature examining how this interacts and is situated within the workings of a multidisciplinary team. In modern elite sport contexts, coaching is no longer an individual endeavour, rather there is an increasing need for coaches to effectively cooperate and engage in multidisciplinary team members from a diversity of professions and disciplines engage both individually and collectively in reflective activities as a characteristic of an effectively functioning high performance team. This may further our understanding of how to develop

workplace environments that are conducive to the development of individual and team 'adaptive expertise'. Current coach education courses and coach educators however, rarely model reflective practice, fail to link reflection clearly and directly to professional learning, and rarely explain what is meant by reflection. In comparison to other disciplines, coaches therefore develop "a muddled and negative view of what reflection is and how it might contribute to their professional learning (Russell, 2013). As such, the club often needs to be a location of reflective education since the individual's aren't getting it from their formal education.

- Research should also be conducted in relation to the personal characteristics of a reflective practitioner. The interpretation of results from this study revealed that there is possible interrelationship between personality traits, exposure to deliberate and purposeful educational opportunities, and immersion in an environment of experiential learning that influences the engagement in different levels or types of reflective practice. Furthermore, does the system or the role within it determine how practitioners reflect, or does the way in which an individual reflects dictate their progression pathway towards a particular role? For example, do coaches predominantly engage in descriptive in-action reflection because of the complex and messy realities of the role and the perceived time constraints associated with it? Or, because the individual is perhaps predisposed to reflect in a certain way, does that determine that they are more likely to progress in a role that favours 'professional artistry'? This is likely to be governed by and specific to the workplace culture, whereby the expectations of the role and its duties are expected differ according to the unique organisational context of the club.
- Finally, further research is required to address the current lack of understanding as to the utility of reflection in the messy realities of applied practice. Coach education programs struggle to integrate reflective practice into their curriculum, whilst activities that are intended to promote reflection are often carried out in decontextualised learning environments which fail to replicate the oftencomplex nature of the day-to-day experiences of coaches in the field. So, while coaches may be 'aware' of the term reflective practice and the importance of appearing to engage in reflection, they may not see its application to their real-

life coaching experience. Multiple opportunities and formats for reflection therefore need to be explored in order to build coaches' capacity for critical reflection. An intervention study aimed to improve coaches' knowledge of, and engagement in, reflective practice is therefore recommended. Whilst the club that was the subject within this MRes study had a reflective model and provided Continuous Professional Development (CPD) opportunities for developing reflection skills, research in less resourced settings would be beneficial. This may involve the researcher delivering a series of embedded CPD activities on reflection that are accessible to participants during their work and in their workplace environment for a period of time. They would then go back and observe the participants at different intervals in the same manner, gauging the depth of their engagement with the reflective process and its embeddedness within their routine practice.

The application of reflective practice to healthcare professions has been widely acknowledged. Indeed, it is now considered a central tenet that assists practitioners in the development of their professional knowledge and practice. It has also become one of the most important sources of personal and professional development within teaching (Larrivee, 2010). Football Club academy environments can learn from the education or training pathways that exist within these professions, utilising some of the methods that they adopt in order to develop reflection as a key competence. With an increased number of performance support service practitioners (Sport Science and Medicine, Physiotherapy) and education professionals working within football academy multidisciplinary teams, the potential for cross-pollination of knowledge, skills and ideas has never been so prevalent. What can be developed in one sector can help enrich another, shifting existing thought patterns which may subsequently lead to new ways of thinking. The topic of reflective practice has often been met with scepticism within sport since it is a complex, unpredictable, and messy concept. Furthermore, it has not necessarily been explored by all coach training programs, with coaches often force-fed reflective logs, models and diaries through many CPD courses. If this situation is to continue, coaches will persistently work 'against' rather than work 'with' reflective learning as a process that can lead to excellence in sport. Williams and Grudnoff's (2011) study on the benefits of reflection in teacher education revealed a similar initial scepticism from both novice and experienced teachers. However, they

reportedly learned to embrace reflection as a tool to analyse and modify their practice once they developed a greater appreciation and awareness of the potential benefits to their practice experiences. Very little research has considered whether practitioners' perceptions of reflection have changed over time within sport. As such, a more comprehensive and multidisciplinary view of the current state of reflection is required, enabling us to understand what works best for practitioners in different settings, as well as examining the effectiveness of different reflective learning strategies.

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Appendix A: Semi-structured Interview Schedule



Instructions: This document is an interview guide that will be used when conducting the semi-structured interviews with participants. Critical incident analysis (Tripp, 1993) was used as a way of scaffolding for reflective practice, drawing upon a personal frame of reference. Having identified an incident which made an impact on the participant's thinking, reflection questions based on Terry Borton's (1970) 'What?', 'So What?' and 'Now What? Model were used, along with cue questions that were added by Rolfe et al. (2001) which allow the participant room to expand their thoughts. Finally, some general questions relating to the participants' understanding of reflective practice and their relationship with it were included.

Demographic information:

Position:

Age:

Number of years in the role:

Previous experiences / roles:

Highest qualification:

Reflection:

- 1. What does reflection mean to you, why it is useful (if at all), and how to do it (if at all)?
- 2. Do you reflect?
- 3. How often (and for how long) and when do you reflect on your coaching?
- 4. Is there a method of reflection that you get most benefit from and engages your thinking most? What are the benefits and how does it engage you?
- 5. What's difficult / are there any barriers?
- 6. Are there any reasons why you don't use reflective practice?
- 7. Did you ever receive any help, support or guidance on how to reflect? How and from whom? How were you taught reflection?
- 8. What do you want to achieve / what is your motivation?
- 9. What are your initial thoughts on reflection? Has this changed or evolved over time?
- 10. Are there any challenges you face when reflecting?
- 11. What impact or effect is it having on you do you perceive any benefits from doing it?
- 12. Does your place of work do anything specific address these barriers / promote reflection activities?
- 13. How was it explained well, what did you think of the explanation? Did you feel you could do this on your own?
- 14. Have you got any advice on how the training or education of reflective practice could be improved?
- 15. Do they do any group or individual?
- 16. What are your opinions on the current Club requirements of reflection? Do you take it further?

Critical incident

- What?
 - 1. What happened, where, when and who? Give a brief history of the incident.
 - 2. What were your immediate thoughts, feelings, responses and / or expectations?
 - 3. What knowledge, values, skills and behaviours did you demonstrate and what actions did you take?
 - 4. What did you base your actions on?

- So What?

- 5. What did you do that seemed to be effective or ineffective?
- 6. What did you like/dislike about the experience?
- 7. To your mind, what were the main reasons behind this incident?
- 8. What are your thoughts / new understanding now?
- Now What?
 - 9. What have you learned about (your) practice from this?
 - 10. How might your practice change and develop because of this analysis and learning?
 - 11. How can you apply this learning?
 - 12. What structures are in place at your work to help you achieve this?

Appendix B: Participant Information Sheet



Ref & Version: PIS1 Ethics ID number: Date:

Participant Information Sheet

Exploring the interpretation and implementation of reflective practice within an elite English football academy.

Please take some time to read this information and ask questions if anything is unclear.

Contact details can be found at the end of this document.

What is the purpose of this study?

This study aims to explore how reflective practice is being perceived and applied within an elite English football academy under the auspices of the Premier League's Elite Player Performance Plan (EPPP). Specifically, it aims to investigate how key staff, working as part of a multidisciplinary team, interpret and implement The FA's Plan-Do-Review model, and how academies mobilise reflective practice according to the values and unique cultural environment of the Club.

Who is organising this research?

The research for this study is being undertaken by Graham Mills who is a masters student in the Faculty of Management at Bournemouth University.

Bournemouth University Research Ethics Committee (UREC) has reviewed and approved this research.

Why have I been chosen?

This project will involve interviews with the participants, which aim to present a vivid and personalised account of how reflection is being utilised within the academy setting, exploring how academy staff are interpreting and implementing The FA's Plan-Do-Review model in their own way within the culture of their own club. You have been chosen specifically because of the skills, knowledge, experience and expertise you possess and the key role you play within the Academy Management Team. We believe that your specialist expertise will enable you to provide a significant contribution to the study of reflective practice within the academy setting, providing a multidisciplinary perspective of how this may impact workplace culture.

We aim to interview 12 participants from the Academy Management Team (AMT) at Academy.

Do I have to take part?

Participation in this study is voluntary and you may ask the researcher questions before agreeing to participate.

If you agree to participate, you will be asked to sign a consent form. However, you are free to withdraw from the study up until the data has been transcribed and anonymised. If you choose to withdraw, you will not be asked to provide reasons for withdrawing.

What will happen to me if I take part?

If you agree to take part in this study, we will conduct an audio-recorded interview.

The interview will be conducted by Graham Mills and will last approximately 30 minutes.

We may ask you to participate in a follow-up interview, though participation in this is optional.

What are the possible benefits of participating?

The study aims to explore the use of reflective practice within an elite English football academy, helping coaches explore their decisions and experiences in more depth, thereby increasing their understanding and management of themselves, their practice, and ultimately the players within their care. This has potential implications for future coach education content, and also a significant impact upon the existing practices of football academies, enabling them to utilise reflective practice more effectively.

How will my interview be used?

The interview will be audio-recorded and transcribed verbatim. This will help the researcher gain a better insight into the participants' perspective of reflection and how these impact on the workplace culture and vice versa. Quotes may be used to support researcher claims, illustrate ideas or demonstrate a gap in the existing research base.

On the consent form we will ask you to confirm that you are happy to assign your copyright for the interview to us, which means that you consent to the researcher using and quoting from your interview. Any recorded material that is used in the study will be anonymised with confidentiality pseudonyms used.

What will happen to the results of the project?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be identified in any external reports or publications and your name and other personal information will be anonymised.

What happens to the interviews collected during the study?

Interviews will be audio-recorded and transcribed verbatim, managed by the researcher for the duration of the project. Only the researcher and supervisor will have access to the interviews and personal information.

What happens at the end of the project?

If you agree to participate in this project, the research will be written up as a thesis. You may request a summary of the research findings by contacting the researcher. On successful submission of the thesis, it will be deposited both in print and online at Bournemouth University, to facilitate its use in further research. The digital online copy of the thesis will be deposited with Bournemouth University's Online Research Data Repository and will be published with open access meaning that it will be available to all internet users. At the end of this project, the audio and digital data collected from interviews with participants will be deposited at the UK Data Service for use by future researchers.

All the information we collect about you during the course of the research will be kept strictly in accordance with current data protection legislation. Research is a task that we perform in the public interest, as part of our core function as a university. Bournemouth University (BU) is a Data Controller of your information which means that we are responsible for looking after your information and using it appropriately. BU's Research Participant Privacy Notice sets out more information about how we fulfil our responsibilities as a data controller and about your rights as an individual under the data protection legislation. We ask you to read this Notice so that you can fully understand the basis on which we will process your information.

Security and access controls

BU will hold the information we collect about you in hard copy in a secure location and on a BU password protected secure network where held electronically.

Except where it has been anonymised, your personal information will be accessed and used only by appropriate, authorised individuals and when this is necessary for the purposes of the research or another purpose identified in the Privacy Notice. This may include giving access to BU staff or others responsible for monitoring and/or audit of the study, who need to ensure that the research is complying with applicable regulations. Any recorded material that is used in the study will be anonymised with confidentiality pseudonyms used.

What about use of the data in future research?

If you agree to participate in this project, the information collected about you may be used in an anonymous form to support other research projects in the future by other researchers and regulatory authorities. Access to it in this form will not be restricted. It will not be possible for you to be identified from this data. Anonymised data will be added to BU's Data Repository (a central location where data is stored) and which will be publicly available.

Who is funding the research?

This research is funded by The Centre for Excellence in Media Practice at Bournemouth University.

What should I do if I have any concerns or complaints?

If you have any concerns about the project, please speak to the researcher, who should acknowledge your concerns within ten (10) working days and give you an indication of how your concern will be addressed. If you remain unhappy or wish to make a formal complaint, please contact researchgovernance@bournemouth.ac.uk.

Fair Processing Statement

All personal data collected for the purposes of this study will be held until it's results are presented of the results and the degree is awarded. Although published research outputs are anonymised, we need to retain underlying data collected for the study in a non-anonymised form for a certain period to enable the research to be audited and/or to enable the research findings to be verified. This information which you supply and that which may be collected as part of the project will be entered into a filing system or database and will only be accessed by the researcher and supervisor involved in the project. The information will be retained by Bournemouth University and will only be used for the purpose of research, statistical and audit and possibly commercial purposes. By supplying this information, you are consenting to us storing your information for the purposes above. The information will be processed by use in accordance with the provisions of the Data Protection Act 1998. No identifiable data will be published.

Appendix C: Informed Consent



Ref & Version: PAF1 Ethics ID number: 26118 Date: 19/03/2019

Participant Agreement Form

Full title of project: Exploring the interpretation and implementation of reflective practice within an elite English football academy.

Name, position and contact details of researcher: Graham Mills, Football Lecturer, School of Sport Health and Social Science, Southampton Solent University, Southampton, UK. <u>Graham.mills@solent.ac.uk</u>

Name, position and contact details of supervisor: Amanda Wilding, Senior Lecturer in Sport Psychology and Coaching Sciences, Department of Sport & Physical Activity, Bournemouth University, Bournemouth, UK. <u>AWilding@bournemouth.ac.uk</u>

To be completed prior to data collection activity

Section A: Agreement to participate in the study

You should only agree to participate in the study if you agree with all of the statements in this table and accept that participating will involve the listed activities.

I have read and understood the Participant Information Sheet (PIS1) and have been given access to the BU Research Participant <u>Privacy Notice</u> which sets out how we collect and use personal information (https://www1.bournemouth.ac.uk/about/governance/access-information/data-protection-privacy).

I have had an opportunity to ask questions.

I understand that my participation is voluntary. I can stop participating in research activities at any time without giving a reason and I am free to decline to answer any particular question(s).

I understand that taking part in the research will include the following activity/activities as part of the research:

Being audio recorded during the project

• My words will be quoted in publications, reports, web pages and other research outputs without using my real name.

I understand that, if I withdraw from the study, I will also be able to withdraw my data from further use in the study **except** where my data has been anonymised (as I cannot be identified) or it will be harmful to the project to have my data removed.

I understand that my data may be included in an anonymised form within a dataset to be archived at BU's Online Research Data Repository.

I understand that my data may be used in an anonymised form by the research team to support other research projects in the future, including future publications, reports or presentations.

	Initial box to agree
I consent to take part in the project on the basis set out above (Section A)	

Section B: The following parts of the study are optional

You can decide about each of these activities separately. Even if you do not agree to any of these activities you can still take part in the study. If you do not wish to give permission for an activity, do not initial the box next to it.

	Initial box to agree
I understand that my words may be quoted in publications, reports, web pages and other research outputs.	
Any recorded material that is quoted will be anonymised with confidentiality pseudonyms used.	

I confirm my agreement to take part in the project on the basis set out above.

Name of participant (BLOCK CAPITALS)

Date (dd/mm/yyyy)

Signature

.....

Name of researcher (BLOCK CAPITALS) Date (dd/mm/yyyy)

Signature

Once a Participant has signed, please sign 1 copy and take 2 photocopies:

Original kept in the local investigator's file

• 1 copy to be kept by the participant (including a copy of PI Sheet)

Appendix D: Approved Ethics Online Checklist

BU Bournemouth University

Research Ethics Checklist

About Your Checklist				
Reference Id	26118			
Date Created	19/03/2019 11:13:07			
Status	Approved			
Date Approved	26/06/2019 13:12:30			
Date Submitted	21/06/2019 12:26:38			
Researcher Details				
Name	Graham Mills			
Faculty	Faculty of Management			
Status	Postgraduate Research (MRes, MPhil, PhD, DProf, EngD, EdD)			
Course	Postgraduate Research - Tourism			
Have you received external funding to support this research project?	No			
Project Details				
Title	Exploring the reflective practice of a multidisciplinary team within an elite English football academy			
Start Date of Project	06/11/2017			
End Date of Project	06/01/2020			
Proposed Start Date of Data Collection	01/04/2019			
Original Supervisor	Amanda Wilding			
Approver	Research Ethics Panel			

Summary - no more than 500 words (including detail on background methodology, sample, outcomes, etc.)

Reflective practice is defined as the process of learning through and from experience towards gaining new insights of self and/or practice (Boud et al., 1985). It has become an essential characteristic of professional competence and, as such, has been identified as a vital aspect of coach education. Nevertheless, reflections on coach education programmes are often carried out in rational environments; decontextualized learning environments which fail to replicate the often complex nature of the day-to-day experiences of coaches in the field. It has been suggested that whilst coaches may think they are reflecting, often they are confused between what reflection is and other mental processes (e.g., pondering, scrutinising, and ruminating). Research on reflective practice has yet to articulate 'how' it is implemented or experienced by coaches, and in what way do clubs initiate, sustain, nurture and influence this process through reflective practice is being perceived and applied within an elite English football academy setting. Specifically, it aims to investigate how key staff, working as part of a multidisciplinary team, interpret and implement The FA's Plan-Do-Review model. Furthermore, how do academies mobilise reflective practice according to the values and unique cultural environment of the Club under the auspices of the Premier League's Elite Player Performance Plan (EPPP).

Twelve members of an Academy Management Team (AMT) will undergo semi-structured interviews to examine the relationship between reflective practice and workplace culture. A semi-structured interview guide will be used to aid the researcher to gain a better insight into the participants' perspective of reflective practice. Themes identified will be organised into a hierarchical thematic structure. Initial results from a pilot project carried out at AFC Bournemouth revealed common pitfalls around the transfer of reflective skills learned through educational programmes and their application to real-world settings. Findings indicated that there is a disconnect between the understanding and learning of reflective practice through coach education courses and its application within the real world. This, if similar findings are to be revealed from the main study, has the potential to impact upon the existing practices of football academies, enabling them to potentially utilise reflective practice more effectively. For instance, a greater understanding of individual difference is recommended to help coaches explore their decisions and experiences in more depth, thereby increasing their understanding and management of themselves, their practice, and ultimately the players within their care. This has implications for future coach education content.

Human Participants

Participants

Describe the number of participants and specify any inclusion/exclusion criteria to used

A judgement sample was deemed to be the most conceptually appropriate approach. The researcher selected 10 members of an Academy Management Team whose key positions will provide a multidisciplinary perspective on the research topic. Participants with such specialist expertise would form a key informant sample, enabling the researcher to collect information from a wide range of academy personnel about how critical reflection impacts on the workplace culture, and to what extent.

Are your participants considered vulnerable?

Is a Disclosure and Barring Service (DBS) check Required?

Recruitment

Please describe how participants will be identified, approached and recruited. Include details of any relationship between researcher(s) and participant(s), e.g. teacher-student

The Academy has an academic research forum which discusses the merits of the many proposals which are presented. The study will be presented within this forum along with a statement of intent and relevant information relating to voluntary informed consent. The informed consent document will fully inform the participants about the aims and nature of the research, whilst also giving them ample opportunity to ask any questions they need in order to feel comfortable about their involvement.

Do you need a Gatekeeper to access your participants?

Yes

No

No

Please provide details, including their roles and any relationship between Gatekeepers and participant(s) (e.g. nursing home manager and residents)

The Head of Coaching will act as gatekeeper, protecting access to the respondents. Permission will be sought from them to gain access to the participants whilst adequate consideration of their needs and any potential for harm will be carried out. All potential research subjects will be given the opportunity to refuse to participate in the research. They will not be made to feel that they are being coerced into participation through undue pressure or distress.

Data Collection Activity				
Will the research involve the completion of a questionnaire/survey? If yes, don't forget to attach a copy of the questionnaire/survey or sample of questions.	No			
Will the research involve interviews and/or focus groups? If yes, don't forget to attach a copy of the interview/focus group questions or sample of questions.				
Will the research involve the collection of audio materials?				
Will the audio recordings be used solely for the purposes of producing an anonymised transcript/summary and then deleted and will not be used in any outputs or made publicly available?				
Will your research involve the collection of photographic materials which will identify a participant?				
Will your research involve the collection of video materials?				
Will the study involve discussions of sensitive topics (e.g. sexual activity, drug use, criminal activity)?				
Will any drugs, placebos or other substances (e.g. food substances, vitamins) be administered to the participants?				
Will the study involve invasive, intrusive or potential harmful procedures of any kind?				
Could your research induce psychological stress or anxiety, cause harm or have negative consequences for the participants or researchers (beyond the risks encountered in normal life)?				
Will your research involve prolonged or repetitive testing?	No			

Consent

Describe the process that you will be using to obtain valid consent. If consent is not to be obtained explain why

Written informed consent will be obtained from each participant; the research is absolutely voluntary, and they have the right to withdraw at any time, giving them ample opportunity to ask any questions they need in order to feel comfortable about their involvement. The researcher will ensure that data cannot be traced back to them in reports, presentations and other forms of dissemination, preserving anonymity using pseudonyms.

If participants are minors or for other reasons are not competent to consent, describe the proposed alternative source of consent

N/A

Will it be necessary for participants to take part in your study without their knowledge and consent?

No

Participant Withdrawal						
Describe how the participants will be informed of their right to withdraw from the study	This will be detailed in the voluntary informed consent document which will be provided to all participants, a copy of which will need to be signed and retained by the researcher. They will also be briefed at the start of the interview and given opportunity to ask any questions before proceeding.					
Explain what will be done with the participants' data if they withdraw	Participants will have the opportunity to withdraw until such time that the data is transcribed and anonymised. If they withdraw before this point any data collected will be erased and removed from the study. After this point data will be used to contribute to the study but all data will be anonymised so that any information that can be traced back to their identity or location will be removed.					

Participant Compensation					
Will participants receive Financial compensation (or course credits) for their participation?					
Will financial or other inducements (other than reasonable expenses) be offered to participants?					
Personal Data					
Will identifiable personal information be collected, i.e. data which identifies or could enable identification of the research participant?					
Please give details of the types of information to be collected, e.g. personal characteristics, education, work role, opinions or experiences					
Their background (e.g. qualifications, experience), work role and time in said role,					
Will the personal data collected include any special category data, or any information about actual or alleged criminal activity or criminal convictions which are not already in the public domain?					
Have you considered and addressed the need for 'data minimisation' in your use of personal data for the study?					
Will the data be anonymised at some stage during the study?	Yes				

Storage, Access and Disposal of Personal Data							
During the study, what personal data will be stored and where?	Audio recordings will be recorded and stored on a secure, personal computer and hard drive. They will also be uploaded to the BU secure platform.						
How long will the data be stored?	Data will be stored until such time that the study is completed and submitted, after which it will be erased.						
During the study, who will have access to the data?	Only myself and my supervisors will have access to the data.						
After the study has finished, what personal data will be stored and where?							
After the study has finished, how long will personal data be stored?	Once the study has been completed, submitted and approved (including any viva examination, or thesis defence), the personal data will be erased from my personal computer and hard drive. This is anticipated to be up to a maximum of three months.						
After the study has finished, who will have access to the personal data?	The data will be held on the BU secure platform, only accessible by authorised individuals with access control through a password protected secure network.						
/ill any identifiable participant data be ansferred outside of the European conomic Area (EEA)?							
How and When will the data be deleted/destroyed? All files will be securely erased using an application for performing a secure deletion of files or disks (such as Heidi Eraser). IT Services will be consulted.							
Will any data be stored on the BU's Data Repository "BORDaR"? Yes							
Risk Assessment							
Have you undertaken an appropriate Risk Assessment? Yes							
Attached documents							
Participant Agreement Form.docx - attached on 26/03/2019 08:55:56							
Questions for semi-structured interviews.docx - attached on 23/04/2019 16:21:17							
Participant information sheet1.docx - attached on 21/06/2019 12:26:12							

Appendix E: Transcript Extract

- Interviewer: So, first of all, what does reflection mean to you? So what's your understanding of reflection?
- Participant B: Um. Probably would have used it or come across it with, with more so the coaching. So after action probably, so after, after coaching, would probably reflect on the, the session and the, the impact of that session against the outcomes I guess, that would be the main bit.
- Interviewer: And, how would you reflect, generally?
- Participant B: Um. I've tried different ways. So. One, quite a few years ago now I, I through a spell of actually, writing down notes after sessions. Um. You know like er, almost, I set myself a few questions. So what was good about this session? What wasn't so good? What would I do next time? I found that quite useful. Um. The fact that I can actually refer back to it was good. Um. In this current role, with, little bit of commuting, I, I would probably, spent some time just thinking about it. Again that, that was, um, worthwhile, I guess, to an extent. Um. But it didn't necessarily have the same impact as it did with writing it down, but it's still useful, and the other one was a dictaphone. I tried that. Um. I didn't quite, I didn't really enjoy that if I'm honest, listen to it back. Um. So out of those ways of, of doing it after the coaching activity, writing it down seemed to, er, work for me I guess.
- Interviewer: So all of those methods are quite individual. Do you find that, that's the way that you prefer to reflect or do you sometimes, do it in a group setting?
- Participant B: Um. Not massively, I've not, not really ever gone, er, if I've been coaching with another coach I might ask after like, what did you think of it tonight, you know, ask those little, little bits but to actually reflect. Um. And get detailed feedback from them, probably not no.

Interviewer: So do you find the process quite useful?

- Participant B: Yeah, yeah. Um, so, the, the main bit, being writing it down, I think I got more out of that than actually just thinking about it or, speaking about it. You know actually wiring it down and documenting it was, quite useful. This is just for me yeah. But yeah, I think it's, um really, really good. Yeah.
- Interviewer: You mentioned that, generally you would do it after. So if, if you had just finished a session, um, you might reflect after. Do you ever find that you reflect within your session?
- Participant B: Um. Yeah, yeah. So when, when it's going on you're, you're constantly thinking, what would I do differently here now, or how has that just gone on, what impact am I having, is the session working. I think definitely you'd, yeah, there'd be some level of reflection there.
- Interviewer: Do you find that a challenge, or...?
- Participant B: Um. No I just think it, it, that's, generally quite normal, I think you'd, you'd be thinking about is this having the impact it needs to, or can I change. Is that player being challenged. I find that comes, you know, as, as quite normal I'd say. I um, yeah, like I say it's, I've always sort of done that I guess.

Appendix F: Thematic Analysis

Codes	Organising Themes	Global Themes
Use of self-selected mentors e.g. "I respect their knowledge and experience, they're someone I trust 100%." Use of anchors (confidantes and sounding boards) e.g. "I go to my wife for example who doesn't know anything about football, but she's really balanced and asks good questions."	Communities of Practice (Informal Support)	
e.g. "I've been, fortunate in recent seasons where I've actively engaged with mentors. That's really helped me talk through my reflections which can lead to actions. Being questioned and challenged on them has been really beneficial".	Mentorship (Formal Support)	
e.g. Optimise Leadership Programme, CORE CPD, Development Action Plans etc. e.g. "You have an incredible amount of personal development meetings here, whether it's from CPD to individual coach development plan. I have my PDR's. I have weekly catch ups. We do CPD events and internal courses where we all reflect".	Internal training methods (e.g. internal CPD events, line manager, development plans etc.)	Professional Support
e.g. EHoC (Elite Head of Coaching), ILM Leadership Course, FA / UEFA qualifications, PGCE, University degree programmes etc. "There might be external courses that we can utilise. They don't have to be football people, they can be non- football people, but can help us to be more reflective in what we do and how we do it".	External training methods (e.g. external CPD event, courses, qualifications etc.)	

Codes	Organising Themes	Global Themes
VUCA environment e.g. "I need clarity and if it's noisy (too much information), I can't process that. We have meetings where there are seventeen or eighteen people in the room and for some of it I might be sitting there going, well that's irrelevant, that's irrelevant, that's completely irrelevant". "There's lots of different factors and elements, that I need to be aware of and sometimes it becomes quite a big task to reflect on everything".	Environmental	
Time e.g. "I definitely find it useful, it's just time dependent. Due to workload, I'm probably guilty of not giving myself enough time to reflect. It's not until you get the free time that you realise just how much time you do need to reflect in my opinion". Workload e.g. "There are constantly tasks to do and so there is always something else that needs to be done. Because the way I see it is, everything is for the players and the players always want stuffthere's never a time where they don't want anything".	Work related	- Limitations and barriers
Energy e.g. "It might take you a lot of energy to go to that space and I don't always have the energy for that. I'm finding myself quite drained mentally" Bias e.g. "I reflect on my performance based upon my values and my bias. The danger is that you can simply end up confirming your bias, searching for everything that supports your argument to make you look and feel better".	Personal	
e.g. "Being able to video stuff and reflect back on has helped us move into more complex or messy discussions. I think the challenge is the recording, documenting and collating of it. I think there's a lot of, and it might be too grand to describe them as reflective conversations, but if you were to sit at lunch, there's almost a reflective process of people, discussing what's happened and, what their approach was and others adding feedback, or views. So, I think informally it's happening. Are we capturing it as effectively as we could? I don't think we are".	Complexity	

Codes		Organising Themes	Global Themes
 e.g." I don't think I've ever done reflective practice in a formal way. So I've never gone down and gone through a structure this how I reflect. I think I do quite a lot of reflection intuitively and instinctively, and I don't think I have a certain set of questions that I ask myself in a period, unless it is a significant event analysis or something like that where you are really drumming down". e.g. "It's interesting 'cos I haven't really got any terms or labels. I think it's how I'm feeling, the emotions that I got from the session, the good and bad outcomes that come from it. Maybe the coaching points that didn't sink in straight away and whether I explained them clear enough. So, I think maybe it's more so what happens and what stands out in the session. But then always come back to whether I achieved the intended outcomes of the session". e.g. "I work on intuition. I don't write anything down. That's always been how I've been at my best coaching-wise and that's how I prefer to reflect too. So, within the moment I'm constantly going is this getting anywhere near the objective I want? Is the objective too easy? And I've always been quite comfortable with that. I want to be feeling coaching, I want to be in the moment. There's so many variables that can come in, that I prefer coaching on intuition and reflecting within the moment with everything going around" e.g. "I'm probably more a bit of an off the cuffer, if that makes sense". 		Professional Artistry	Levels of reflection
 e.g. "We're trying to look below the surface and understand what's going on, to try and make sure that we understand what's down there as it gives us a better comprehension of the subject itself. I find I spent far too much time overthinking huge amounts". e.g. "it's almost an ever-evolving piece I think, it'll just keep curtailing on reflection on reflection on reflection, to drive, people to delve in a little bit deeper". e.g. "When it's process driven and there's been some real good, in depth, deep and more transformational stuff, I'll need to analyse the information by writing it down. This isn't my strong point, but I have to otherwise, in that instance, I can't keep track of where we are. So, the closing of the loop potentially gets even further and further away. 		Technical Rationality	