# EXPLORING REFLECTIVE PRACTICE ENGAGEMENT AND DEVELOPMENT WITHIN TRAINEE SPORT AND EXERCISE SCIENTISTS

**EMMA LOUISE HUNTLEY**

A thesis submitted in partial fulfilment of the requirements of Liverpool John Moores University for the degree of Doctor of Philosophy

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**Abstract**

It is generally accepted that engaging in reflective practice (RP) is important to be a competent and effective practitioner. However, evidence supporting this claim is sparse, highly theoretical and located within a variety of domains. Whilst the literature focusing on RP within sport has grown and continues to do so, there is also still a paucity of research specifically within a sport and exercise science (SES) setting, even though specific professional development focusing on RP exists for these SES practitioners within the British Association of Sport and Exercise Sciences (BASES) accreditation scheme. Therefore, the aim of this thesis is to evaluate the impact and role of an existing RP curriculum, as well as explore and plot the longitudinal development of RP within trainee Sport and Exercise Scientists. In doing so, a variety of data collection methods were utilised across several studies, including both qualitative (e.g., interviews) and quantitative (e.g., questionnaires) approaches. Findings confirmed that RP is a complex, highly individualised and context-dependent process. In addition, the RP workshop had a positive and significant impact on participants' perceived confidence and competence to reflect. This was coupled with significant decreases in habitual action (HA) or 'acting without thinking' which suggested increases in self-awareness. Furthermore, significant increases were also observed in reflective learning scores over time from 12 months post-workshop attendance, suggesting that such behaviours can take time to develop. Level (or depth) of written reflection however did not statistically change over time, but when explored at the individual level this could have been due to the chosen content of the reflection. Participants also reported both positive and negative experiences regarding the facilitation of their RP beyond the attended workshop, which has implications for RP engagement. The thesis concludes with some recommendations for how to improve the existing approaches for RP facilitation and suggestions for future research.

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**Huntley, E.**, Gilbourne, D., Cropley, B. & Knowles, Z. (2013). *Experiential learning via reflective practice.* BASES Conference 2013. 3rd-5th September 2013, Preston, UK.

**Huntley, E**., Gilbourne, D., Sparkes, A., Cropley, B. & Knowles, Z. (2013). *Reflecting back and forwards: The ebb and flow of reflective practice research in sport.* BPS Division of Sport & Exercise Psychology Annual Conference 2013. 16th-17th December 2013, Manchester, UK.

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# Chapter One

# Introduction

## Introduction

### 1.1 The research problem

Reflective practice (RP) is widely recognised as an important process for practitioners in sport and exercise settings in supporting personal and professional development (Cropley, Hanton, Miles, & Niven, 2010a; Cushion, 2018; Knowles, Gilbourne, Tomlinson, & Anderson, 2007). In addition, RP is also noted as important for trainee practitioners embarking on a developmental journey towards becoming 'qualified' in their respective field, due to its value in supporting experiential learning (Doncaster, 2018; Knowles, Gilbourne, Borrie, & Nevill, 2001; Smith, McEwan, Tod, & Martindale, 2019). However, whilst the literature surrounding the concept of RP has grown over recent years, there still appears to be an element of confusion, including (amongst other factors): how it is utilised; its efficacy in practitioner settings; and how RP and its associated skills develop over time (cf. Knowles, Katz & Gilbourne, 2012).

For those training to become a Sport and Exercise Scientist in the UK, the only available development programme is through the British Association of Sport and Exercise Sciences (BASES). BASES is the UK regulating body for sport and exercise science practitioners, which includes the discipline specialisms of physiology, psychology and biomechanics (and together *multidisciplinary*). BASES, as an organisation, offers practitioners several routeways to professional accreditation within each discipline, which include: *support*, *research* and *pedagogy*. Trainee (or probationary) Sport and Exercise Scientists typically complete a period of supervised experience (SE), supported by an accredited BASES supervisor, whose progress and competence is examined by an accredited BASES reviewer. Within this supervision period, which can range between two and six years in duration, trainee sport and exercise scientists must provide evidence of their knowledge and experience, demonstrating to both their respective supervisor and reviewer how they have met each of the BASES competencies (see Appendix 1).

RP was first *recognised* by BASES in 2002 as part of their SE programme, and in 2009 the competency requirements were updated to stipulate that *engagement* in RP must be *evidenced*, where candidates must "understand the value of reflection on practice and evidence engagement in the process" (BASES sub-competency 5.4). In addition, RP can be used to support the demonstration of several other BASES competencies required, including *technical skills* (2)[1], *application of knowledge and skills* (3), and *problem solving and impact* (7), where *reflective accounts* are

[1] Numbers in parentheses refer to the respective BASES Competency (see Appendix 1)

suggested as ways to demonstrate evidence in each area. In addition, all delegates registered for BASES SE (since 2009) must also attend a programme of BASES core CPD workshops, and one of these is specifically focused on RP. This particular workshop has been delivered to over 350 delegates since the inception of the core workshop programme (up to and including 2019). However, to date, no research has been conducted to explore the impact of attendance and engagement in this particular workshop, or on the subsequent BASES SE experience, or explored the longitudinal development of Sport and Exercise Scientists more generally. Whilst examples of longitudinal research do exist with regard to RP (e.g., Knowles et al., 2001; Knowles, Tyler, Gilbourne, & Eubank, 2006; Kuklick, Gearity & Thompson, 2015a, 2015b; Partington, Cushion, Cope, & Harvey, 2015; Stoszkowski & Collins, 2014a), these are housed within the sports coaching context, and mostly over a period of weeks, which could be deemed too short for any RP development to actually take place or be evident (Cropley, Miles & Peel, 2012). Similarly, longitudinal research within the discipline of sport psychology, has yet to explore RP engagement or development over any length of time. Furthermore, the eclectic use of, theoretical perspectives, research designs, data collection and analysis methods make it difficult to attain comparative clarity. Whilst the body of RP research in sport practitioner settings thus far has illuminated its inherent complexity, broader research within SES related disciplines have tended to adopt single method approaches such as self-reflective accounts (e.g., Doncaster, 2018), focused on student (e.g., Carson, 2008) or experienced practitioner populations (e.g., Koh, Mallett, Camiré, & Wang, 2015) and utilised specific RP techniques (e.g. written; Morton, 2009). Yet, commonplace across these differing approaches and the wider research, RP has been acknowledged has having a contribution to effective practice and increased self-awareness. However, despite this importance and an increased research focus, RP is a complex phenomenon and thus ambiguity still exists as to its definition, techniques used and the levels or depth of reflection possible (Cushion, 2018). Therefore, it is necessary to examine the longitudinal development of RP, in a sport and exercise science practitioner context, utilising a variety of research methods which will provide an original contribution to the RP literature.

### 1.2 Thesis aims and purpose

Considering the research problem outlined above, the specific aims of the thesis are to:

1. Critically explore (current) knowledge, understanding and engagement in RP in the domain of sport.

2. Examine the international landscape of RP within educational and professional development settings in sport psychology.
3. Explore the RP experiences of BASES SE supervisors and reviewers in a UK SES context.
4. Evaluate the impact and role of the BASES RP workshop.
5. Longitudinally plot the development of RPs in trainee sport and exercise science practitioners.
6. Provide recommendations for research, practice and professional training frameworks in sport and exercise science regarding RP.

### 1.3 Structure of the thesis

The research presented in this thesis commenced in 2011 and was completed on a part time basis in 2019. This eight-year period also included a year-long break for maternity leave, which consequently enabled the author to adopt a longitudinal approach to the research, which would not have been feasible had the research been conducted on a full-time basis. The thesis reflects the registration time period and the chapters are presented in a time-sensitive fashion. The corresponding thesis study maps preceding each chapter outline the dates of when the respective data was collected and analysed in order to provide further context for what is presented.

The thesis comprises seven main chapters and contains two large scale empirical studies, as well as a traditional literature review and two systematic literature evaluations, all of which were completed (adopting a chronological approach) between 2012 and 2019, with the findings of each chapter informing the rationale and research design of the next. The thesis concludes with a synthesis chapter to discuss the overall findings, implications and recommendations. Each 'study' chapter (e.g., Chapters 4-7) commences with a thesis study map to highlight the key objectives and findings of the studies, and to clarify where each study fits into the overall thesis. All chapters adopt APA style of formatting and referencing (6$^{th}$ edition), and an overall reference list is presented at the end of the thesis.

Following the present *Introduction* chapter, which introduces the research problem and sets the scene for the remainder of the thesis (written in 2019), Chapter 2 provides a comprehensive background to the research surrounding RP and a critical review of the literature up to 2012, both from outside and within a sports context. This chapter also provided a basis for the rationale to further explore RP within a sport practitioner setting, with a specific focus on RP utility and engagement within the discipline of sport and exercise science. The key topics discussed in this chapter are

definitions of RP, models and frameworks of RP, techniques of RP, and the value of RP.

Chapter 3 provides a background to the research in terms of the paradigmatic assumptions and methodological approaches adopted, as well as a reflective genesis of my worldview when approaching the research and some key ethical considerations.

Chapter 4 (Study 1) explores the sport-specific RP peer-reviewed literature published between 2001 and 2012 more specifically and systematically, in an attempt to ascertain an overarching perspective of this context. The chapter, which was peer-reviewed and published in its entirety in 2014, reports on the predominant nations publishing research on RP, which journals were responsible for publishing such research, the methodologies that were adopted, and the disciplines that were involved.

Chapter 5 (Study 2) is presented as three separate phases and presents the formative research that took place in order to inform the subsequent study/research. *Phase one* sought an international perspective of sport psychology practitioners and educators with regard to RP within their respective nation. The rationale to focus on participants from the discipline of psychology was based on the findings presented in Chapter 3, which identified that the majority of RP research in sport had been conducted within psychology. *Phase two* reports on the examination of BASES supervisor and reviewer experiences with regard to RP, from the point of early formal education, to becoming a BASES Accredited Sport and Exercise Scientists, to the present day as a BASES supervisor and/or reviewer. *Phase three* examined the BASES reflective practice workshop evaluation forms obtained between 2013 and 2015 (inclusive), in order to ascertain a view of how the workshop, in its existing format, was perceived by attending delegates (trainee sport and exercise scientists) immediately after attending. The data were anonymous and already summarised prior to accessing from BASES but provided formative feedback on areas of strength and suggestions for potential improvement.

Chapter 6 (Study 3) presents a contemporary literature update, adopting the same methods utilised in Chapter 3 (Study 1), but focusing on sport-specific RP literature published between 2013 and 2018, in order to provide a real time update that is sensitive to the longitudinal and chronological approach adopted within the thesis.

Chapter 7 (Study 4) presents a longitudinal mixed methods study that used a novel combination of quantitative data collection methods along with qualitative

techniques to explore trainee Sport and Exercise Scientists' experiences and perceptions of RP throughout a period of SE.

Chapter 8 provides an overall synthesis of the results from each of the four studies, discusses the key findings and details the strengths and limitations of the thesis, along with some key recommendations for future research and practice with regards to RP in the sport and exercise sciences.

# Chapter Two

# Literature Review

## 2.1 Introduction

The following chapter aims to critically examine the reflective practice literature, sitting both outside and inside the sport domain, up to and including the year 2012. The rationale for this is to ensure the subsequent data chapters retain a temporal flow, given the thesis was conducted on a part-time basis over 8 years, including a 12-month break for maternity leave. The chapter includes a review of the foundations of RP, as well as a critical review of definitions, skills and characteristics, models and frameworks, techniques and methods and the value and purpose of RP.

## 2.2 Foundational theory and background of reflective practice (RP)

RP is a concept that has received much attention within the sport literature in recent years (up to 2012), particularly in practitioner settings such as sport coaching, sport psychology and sport science. However, from the foundations of the concept, it is evident that there are a range of theoretical approaches to conceptualising RP, which has resulted in a confusing picture for researchers and practitioners alike.

Foundational theorist Dewey (1933) defined reflective thought as, "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 118). Dewey further argued that "the consequences of a belief upon other beliefs and upon other behaviour may be so important, then, that men are forced to consider the grounds or reasons of their belief and its logical consequences" (p. 5). This indicates that we (as human beings) learn from experience. This was subsequently supported by Lewin's (1952) work on action research and Kolb's (1984) experiential learning theory (ELT). ELT refers to the organisation and construction of learning from observations produced in a practical situation, with the implication that the learning can lead to action or improved action (Moon, 1999), which Kolb depicted as a continuous spiral. Within this spiral, *reflective observation* is argued to enable a *concrete experience* to be brought into a state of *abstract conceptualisation*. Such abstract concepts then guide *active experimentation* and subsequently lead to more *concrete experience* and thus the cycle continues with further experience and learning. Should learning have indeed occurred during this process, new experience/s on which to *reflect* and *conceptualise* should be created within each cycle as successive action is experienced within a different set of circumstances (e.g., greater knowledge, more informed practice). However, whilst these authors support a link between experience and learning, such an approach does not account for context, one's values and beliefs, social and political issues.

A theoretical approach that did provide such an appreciation of these contextual issues however was proposed by Habermas (1971), whose theory of critical social science, grounded in pragmatic constructivism, adopted a philosophical stance focusing on the development of knowledge or 'knowledge constitutive interests'. These are most commonly represented in three forms: those of a *technical*, empirical nature; those relating more practically (*practical*) to social sciences and human behaviour; and, emancipatory interests, requiring *critical* enquiry so to understand more fully the self, and the context one finds themselves.

Underpinned by Habermas' critical theory, educationalist / psychologist Mezirow (1978, 1981) also explored adult knowledge and learning through the development of *transformational learning theory*, where he posited that individuals must reflect on their assumptions and beliefs to bring about change. Mezirow (1990) described reflection as involving "the assessment of the assumptions implicit in beliefs, including beliefs about how to solve problems" (p. 12) and that examination of the nature, consequence and origin of ones meaning perspectives, or critical reflection, can result in perspective transformation (Taylor, 1997). However, authors have since criticised Mezirow's theory for its fundamental rationality and its subordinate role of context in relation to that of individual agency (Clark & Wilson, 1991). Therefore, it may be that an appreciation of knowledge generation from a variety of perspectives is necessary rather than being tied to one approach that has been criticised for adopting a reductionist / fundamentalist paradigm.

Similarly, in the late 1970's, Schön reported his dissatisfaction with the fundamental approaches to knowledge generation, professional practice and problem solving encompassed by technical rationality (e.g., which Rolfe (2011) argues is when knowledge is derived from decontextualised and objective scientific research and then applied to practice in a one-way fashion), including empiricism, objectivity, and generalisation, which he contended was the leading paradigm in scientific professions (e.g., engineering). He argued that such positivistic approaches were limited, recognising that problematic situations in this world are often (if not always) plagued by indeterminacy, uncertainty, instability, or complexity, and cannot be managed effectively when practice is separate from research, and when *doing* is not aligned with *thinking* (Schön, 1983). This is considered especially true within professions that involve care and human interaction often denoted as 'educare' professions (e.g., teaching, nursing and social work). Decision making in such environments where multiple perspectives, ideas and solutions exist is both challenging and complex for the practitioner. However, the technical-rational view devalues expertise and experiential learning (Rolfe, 2011). Yet, even in those professions resolutely

grounded in positivism, individuals still often find themselves in 'swampy lowlands' where dilemmas stem from uncertainty, instability and value conflict (Schön, 1991), and thus technical rationality cannot account for such divergent situations. Ryle (1963) argued that 'knowing that' (typically associated with a positivist paradigm) both precedes and informs the 'knowing how to' and that both ideas are paramount to practitioners' effectiveness. For example, as a nurse, knowing *that* a patient needs CPR and knowing *how* to administer CPR are different, yet both vitally important for a practitioner (Rolfe, 2011). Such dilemmas led to the emergence of a new paradigm, which accounted for the idiosyncrasies of professional practice; *reflective practice* (Schön, 1983; 1987). Within this pragmatically constructed epistemology (Farrell, 2012 [pragmatist]; Kinsella, 2006 [constructivist]), Schön described the processes of *reflection-in-action* (to reflect *during* a situation or activity) and *reflection-on-action* (*retrospective* reflection on a previous situation or activity). Therefore, in contrast to the earlier described theories of *reflection*, *reflective thinking* and *critical reflection*, Schön's conceptualisation incorporated more of a practical or 'doing' focus. RP appears to be a concept widely accepted in domains such as education and nursing, with little questioning of the theoretical grounding of the concept, often adopting Schön's plausible argument against the technical rational perspective. However, criticism for the concept of RP focuses on: (a) its grounding on one individual's personal dissatisfaction with practice and its lack of empirical evidence (Cornford, 2002); and (b) Schön's lack of an *actual* definition of the concept of RP, only the terms that were associated with it (in- and on-action), which also potentially explains some of the confusion surrounding the concept. Therefore, the following section will critically review some of the historical and contemporary issues surrounding definitions of RP, as well as associated characteristics which may offer more clarity for the future.

### 2.3 Definitions of RP

RP is a concept that has been broadly accepted as being beneficial to practitioners in multiple domains, although it is also accepted that confusion remains, at the time of writing, over terminology, its application and its effectiveness. Perhaps inspired by Schön's concept, researchers have, over time subsequently set out to define RP. For example, Reid (1993) stated that RP is "…the process of using reflection to influence how practitioners' approach and respond to varying situations" (p. 306), whereas Johnston and Badley (1996) defined RP as, "…the acquisition of a critical stance or attitude towards one's own practice and that of one's peers" (p. 4). More recently, Thompson (2005) defined RP as, "An active process of constructing solutions, rather than a passive process of following procedures or guidelines" (p.

196), and Bager-Charleson (2010) defined RP as the, "identification of recurring problems with a view to eventually reaching a stage of 'transformative learning' in which problems are put into context" (p. 3). As of 2012, 30 years have passed since Schön's first introduction to RP, and whilst some *elements* of definitions are aligned (e.g., most agree RP is an active 'practice-orientated' process), most remain varied and contradictory (e.g., with different foci including RP as 'problem' focused, including 'others', or creating 'solutions'). In addition, most definitions do not relate to any underpinning theory (Jarvis, 1992) and do not emanate from empirical data, but instead are more often based on idealistic representations of practitioners writing textbooks about RP in different practitioner disciplines.

Such confusion is highlighted by research within nursing (e.g., Bulman, 2008), education (e.g., Finlay, 2008) and medicine (e.g., Koole, Dornan, Aper, Scherpbier, Valcke, Cohen-Schotanus, & Derese, 2011). For example, Fook, White and Gardner (2006) attributed this conceptual confusion to the variation in the learning focus of RP (e.g., cognitive, emotional, political). However, others have argued confusion stems from a lack of a theory of practice (Jarvis, 1992) on which to base an RP definition on. Further, perplexity results from the interchangeable use of related terms (e.g., reflection; evaluation; critical review), or the apparent crossover in definitions for such terms. Mackintosh (1998), a nursing practitioner, argued that whilst terms such as reflection, reflective thinking, reflectivity and RP were all used interchangeably, upon further inspection of their respective underpinning theories (cf., Dewey, 1933; Mezirow, 1981; Schön, 1983, 1987), they are indeed distinct terms. For example, Bulman (2008) argued that reflection is "reviewing experience from practice so that it may be described, analysed, evaluated and consequently used to inform and change future practice" (p. 2). The latter aspect of this suggests a practical / action element, which is often described as the key difference between 'reflection' and RP; reflection being cognitive and static, and RP having an action or practical element.

Another often associated term with RP is that of *reflexivity*. Reflexivity has been described as "a critical approach to professional practice that questions how knowledge is generated and, further, how relations of power influence the processes of knowledge generation" (D'Cruz, Gillingham, & Melendez, 2007, p. 77). In addition, *reflexive practice* requires learners to reflect on broader social norms rather than just oneself (Lay & Maguire, 2010, p. 543). Support for this breadth beyond the *self* is observed by Howatson-Jones (2010) who, within a nursing setting, stated that reflexivity involved "Reflecting on the specifics of situations, as well as the conditions from which they arise, and how we might be implicated in those conditions" (p. 79). Further, reflexivity within learning requires awareness of one's internal dialogue,

embedding learning through integration, recognising relatedness of knowledge and having *awareness* of the nursing discipline as a community of practice. According to Rolfe (2011), "… a reflexive practitioner is *aware* of her methods of practice, not only reflecting on details of situation but also meta-reflecting on the process of how she is dealing with the situation" (p. 167), thus suggesting both a *past* and *present* element exists. However, in a bid to try to alleviate the confusion over conceptualisations of different terms, Rolfe (2011) also described reflexivity as reflecting 'in-action', whereas reflection 'on-action' was described as *reflective*. Nevertheless, Dallos and Stedmon (2009), from a psychotherapy and counselling domain, offered a conflicting view by describing personal reflexivity as retrospective or 'on-action', and personal reflection as present and 'in-action'. The highlighted issues (e.g., whether reflexivity is a present or retrospective process) therefore contribute to misunderstanding the concept of RP, which have evidently infiltrated across many domains of practice.

Further misunderstanding is apparent when the hierarchy of RP and associated concepts is considered. For example, the term *reflexive* appears *within* some definitions of RP, such as that of Duffy (2008) who described RP as:

> An active and deliberate process of critically examining practice where an individual is challenged and enabled to undertake the process of self-enquiry to empower the practitioner to realize desirable and effective practice within a reflexive spiral of personal transformation (p. 1405).

However, others describe reflexivity as a characteristic *of* reflection (e.g. Johns, 2004). Thus, this lack of conceptual clarity has made it difficult to understand such concepts and terms in relation to each other. The reviewed literature suggests two key elements of misunderstanding surrounding definitions: (1) *temporal* - relating to *when* reflexivity should take place, for example, *past* (Dallos & Stedmon, 2009; Johns, 2004) or *present* (Rolfe, 2011) experiences, *both* of these timepoints (Rolfe, 2011), or the *transition between* such timepoints (Johns, 2010); and (2) *hierarchical* - referring to *where* reflexivity lies conceptually in relation to other associated (and previously discussed) terms (e.g. reflection, reflective practice). Other terms such as meta-reflection, introspection, bias, and self-awareness are also used to describe reflexivity, some of which are also used in the descriptions and definitions of RP. However, regardless of the interpretation, common themes to most definitions of reflexivity include/require an *awareness* that is not necessarily present in the reviewed definitions provided for reflection and RP. This includes being self-aware of one's assumptions and the implications of being in a given situation at a given moment, *what* that may entail and *why*, but also being aware of one's personal competences and areas for development, and the impact that may have on/in a wider context.

Others use the term meta-reflection, or to be aware of one's awareness, or to reflect on one's reflections (Rolfe, 2011) when discussing reflexivity. A similar argument could be applied to RP, in that both *temporal* and *hierarchical* confusion also exists with all terms associated with RP. A common example of this is the interchangeable use of reflection and RP which could easily be implied or accepted according to the existing literature base. Finally, such lack of clarity amongst definitions reaches beyond that of conceptual (mis)understanding. In real world settings, including practitioner development, such conceptual misunderstanding can more broadly influence learners' perceptions of competence and confidence (e.g. self-efficacy) as well as engagement with that learning (e.g. motivation / self-determination) which ultimately thwarts the fundamental idea RP.

### *2.3.1 Definitions of RP within the sport literature.*

Education and nursing appear to be the most advanced practitioner domains regarding RP. It is therefore not surprising that early RP research within sport (e.g., Anderson, Knowles & Gilbourne, 2004; Knowles et al., 2001) relied on or 'borrowed' from these other disciplines, including education (e.g., Boud, Keogh, & Walker, 1985; Kolb, 1984; Moon, 1999), and nursing (e.g., Ghaye & Lillyman, 2000; Johns, 2000). More recently, researchers within sport-related domains have begun to take ownership and present their own definitions of RP that, whilst still acknowledging definitions from other domains, consider the discipline-specific nuances exhibited in sporting contexts. For example, within a sport psychology context, Anderson et al. (2004) suggested that "reflective practice is an approach to training and practice that can help practitioners explore their decisions and experiences in order to increase their understanding of and manage themselves and their practice" (p. 189). Alternatively, Knowles et al. (2007) referred to RP as "an approach to practice that involves creating opportunities to access, make sense of and learn from tacit knowledge in action we use in our daily work… this knowledge in action incorporates values, prejudices, experience, knowledge and social norms" (p. 109). Knowles and Telfer (2009), within a general sport practitioner context, reported RP as a "cognitive (thinking) process which brings together deliberate exploration of thoughts, feelings and evaluations focused on practitioner skills and outcomes" (p. 24), whereas in coaching, Hughes, Lee and Chesterfield (2009) argued that RP allows "sports coaches to explore their decisions and experiences, which can reinforce and develop new knowledge" (p. 368). Illustrated here, most definitions emanating in the sport literature appear to concur that RP involves exploration, experience, knowledge and learning.

The sport-specific definition of RP offered by Anderson et al. (2004) has been heavily cited within both sport coaching (e.g., Carson, 2008; Hughes et al., 2009; Knowles et al., 2006; Tod, Bond & Lavallee, 2012) and sport psychology literature (e.g., Friesen & Orlick, 2010; Knowles et al., 2012; Martindale & Collins, 2005; Sharp & Hodge, 2011; Tod, Andersen & Marchant, 2009; 2011). Whilst Anderson et al.'s work can be deemed to have positively impacted on the growth of RP literature in sport, as well as improving understanding of the importance of RP in sport practitioner settings, a lack of clarity is still apparent regarding the nature of RP. Therefore, the current viewpoint is that a range of representations exist as to the process and understanding of what we, in sport, know RP to be.

Consequently, at this point in time (2013), rather than subscribing to one of the many available definitions of RP and the associated terms offered in the reviewed literature, a summary of the key terms/phrases/concepts associated with each of these concepts are instead offered in the form of working definitions. As such, reflection is summarised as a cognitive process that focuses on thoughts about one's knowledge and experiences, whereas reflexivity is an inward-looking objective thought process that focuses on one's behaviours, values and assumptions. Furthermore, the majority of definitions concur that RP is a 'process', triggered by an 'experience' where an 'analysis of meaning' takes place, and leads to an 'outcome' such as 'improvement' or 'change'. Finally, critically reflective practice involves examining, questioning, and/or challenging knowledge, beliefs, assumptions and/or practice towards future change.

### 2.4 Skills and characteristics of RP

The aforementioned working definition suggests that a set of specific skills are required in order to actualise RP. Therefore, one way of potentially developing greater clarity and agreement regarding its conceptualisation is to explore the skills (personal attributes) and characteristics (environmental conditions) required to engage in RP and ultimately become a reflective practitioner. A similar approach has been taken within the educare domain where research has indicated that the skills and characteristics required for RP (e.g., Atkins & Schutz, 2008).

Fay (1987) suggested that the prerequisites for an individual to be able to engage in RP included: curiosity, commitment, and intelligence. Further, Atkins and Murphy (1993) proposed that self-awareness, critical analysis, description, synthesis, and evaluation are the cognitive and affective skills required to be *reflective,* which they suggest underpins RP. Such personal factors are all argued to implicitly exist within the theories previously offered by Mezirow (1981), Schön (1983) and Boud et

al. (1985). Driscoll (2007) proposed that *commitment* and a *desire to ask questions* about oneself and associated practice are required to become a reflective learner, and thus practitioner. Other authors have suggested that when reflecting with others, skills such as *active listening*, *empathy*, *assertiveness*, *supporting and challenging*, and *planning and management of change* also become important for RP (e.g., Brockbank & McGill, 1998; Durgahee, 1998; Page & Meerabeau, 2000).

Atkins and Schutz (2008) argued that RP is primarily for those engaged in professional practice activity, not those merely sat in a classroom setting and therefore relevant opportunities are required (or must be provided) in order to (learn how to) reflect and fully engage in the process. Such opportunities could include time to engage in RP. Based on their research within a medical education setting, Driessen, Van Tartwijk, Overeem, Vermunt and Van Der Vleuten (2005) also found that experiences were paramount for RP, as well as: access to *support through coaching*; provision of *structure and guidelines*; and *summative assessment*. However, in critique, this was based only on the educator's perspective and not that of the students engaged in the RP process at the time. In addressing this, utilising focus groups to ascertain undergraduate medical students' perceptions of learning reflective skills, Vivekananda-Schmidt, Marshall, Stark, Mckendree, Sandars and Smithson (2011) identified that relevant experience, feedback, mentoring, and peer support assisted in the development of RP engagement. When RP processes involve others (e.g., a mentor, supervisor or within a group), notable environmental conditions thought to benefit RP include the establishment of ground rules, such as respecting others' opinions, remaining open, ensuring confidentiality, honesty, displaying commitment and good listening (Bulman & Schutz, 2008).

Atkins and Schutz (2008) also explored attributes of the reflective practitioner, based on the earlier works of Schön (1983; 1987). These included: demonstrating artistic practice, possessing a repertoire of experience, being able to frame problems and experiment in practice, having an ability to articulate your RP, having a transactional and constructivist relationship with practice, and possessing tacit knowledge. Aligned to these findings, Vivekananda-Schmidt et al. (2011) suggested that reflective *skills* included: the identification of an area to reflect upon; the selection or focus on key aspects; writing down, making sense and integration with existing knowledge; and planning to make future changes.

In considering the work that has focused on the skills and characteristics required for RP, as reviewed in this section, a number of issues are apparent. First, authors imply that all reflections should adopt a written technique. However, as explored later, it is evident that other techniques for RP are available and are viable

options. Second, it could be argued that some of these 'skills' (e.g., those presented by Vivekananda-Schmidt et al., 2011) are in fact better described as *stages* of a reflective process when compared to the definitions (reviewed previously) and frameworks (reviewed later) in this chapter and are therefore arguably better defined as *processes* as opposed to *skills*. Finally, the *skills* required for RP will largely depend upon the purpose of an individual engaging in RP and therefore attempting to provide a universal framework of skills and/or characteristics for the reflective practitioner is problematic (cf. Cropley et al., 2010a).

### *2.4.1 Skills and characteristics of RP within the sport literature*

Many papers published within sport have acknowledged the concept of reflective skills and their need for development, for example, in sport coaching (Carson, 2008; Cushion, Ford, & Williams, 2012; Knowles et al., 2001), sport psychology (Anderson et al., 2004; Cropley et al., 2010a; Holt & Strean, 2001; Knowles et al., 2007) and athlete populations (Jonker, Elferink-Gemser, & Visscher, 2010, 2011; Jonker, Elferink-Gemser, de Roos, & Visscher, 2012; Richards, Mascarenhas, & Collins, 2009). Specifically, Knowles et al.'s (2001) action research study aimed to develop and assess reflective skills in a small, purposeful sample of undergraduate coaching students ($n$ = 8) through a structured development programme. Assessment of the reflective level attained (see next section) was achieved through an adapted model incorporating theories/research by Mezirow (1981), Goodman (1984) and Powell (1989). Six coaches purportedly developed reflective skills as demonstrated by the depth and extent of their reflection on practice. However, a specific list or overview of these 'reflective skills' were not provided, perhaps due to the exploratory nature of study in this setting.

Authors have also established that the development of reflective skills is a complex process, even when structured support is provided, and such skills do not occur naturally simply through experience of reflecting (e.g., Carson, 2008; Cushion et al., 2012). Further recommendations were made by Knowles et al. (2001) to explore the relationship of reflective skills with other constructs including self-confidence, anxiety and reflective focus (breadth). A subsequent study from Knowles, Borrie and Telfer (2005) sought to explore how reflective skill development was included within a broader coaching context by investigating coaching curricula material. Analysis of such documentation indicated that no mechanism for developing reflective skills was provided for coaches engaged in coach education programmes, although the authors deemed this a possibility through the current curriculum structures that were in place.

Within an applied sport psychology setting, Cropley et al. (2010a) utilising a qualitative methodology, examined the relationship between effectiveness and reflective practice, as well as current practices, knowledge, and beliefs of applied sport psychologists with regards to reflective practice. Participants (trainee and accredited sport psychologists) agreed that support is required to develop reflective skills, acknowledging disparity among the population of trainees: "although some people may have a set of reflective skills others don't, and therefore there needs to be some means of acquiring them" (p. 530). A further issue raised was about a lack of feedback on reflective skills within accreditation programmes for trainee sport psychologists (e.g., "you don't get to develop and get feedback on reflective skills" p. 530). Whilst participant numbers were few, emergent views appear to align with other research within the sport domain, that reflective skills need support to be developed and are not simply a by-product of one's experience in a given practitioner setting.

Richards et al. (2009) argued that although reflective skills had been explored in coaching, it had yet to permeate into developing such skills in athletes. In attempts to address this, Jonker and colleagues (2010, 2011, 2012) illustrated an alternative view; that reflection itself was a self-regulatory skill, along with planning, self-monitoring, evaluation, effort and self-efficacy. Jonker et al. (2012) through empirical investigation via questionnaires, found that self-regulatory skills (including reflection) were higher in elite athletes compared to more novice athletes (Jonker et al., 2012). In this research, reflection was measured using the reflection subscale of the Self-Regulation of Learning Self-Report Scale (SRL-SRS; Toering et al., 2012). This subscale consists of the five items presented on the Reflective Learning Continuum (RLC; Peltier, Haym, & Drago, 2006) and so it provides a unique perspective within the RP sports literature, given its (rarely observed) quantitative focus and large sample size compared to the majority of methodologies utilised (if indeed at all one is acknowledged when considering many RP discussion papers and textbooks). Furthermore, Jonker et al.'s research was theoretically underpinned, adopting Zimmerman's and Mezirow's learning theories associated with self-regulation. In addition, the findings provide value for reflection given its positively correlated outcomes (i.e. greater athlete success). However, presenting reflection as a skill in its own right creates a further clarity issue when others suggest reflection *requires* a set of skills (e.g., Atkins & Schutz, 2008).

Whilst characteristics, skills and conditions have received some attention in practitioner settings, especially in textbooks relating to domains outside of sport, the discussions that have taken place surrounding such skills within sport are equivocal and lacking focus. There appears an appreciation that reflective skills are important,

and concurrence that they need support to be developed, but a definitive 'list' of what these skills may or may not be is still lacking. However, what are commonplace within the literature across practitioner domains are models and frameworks of RP, which perhaps help to translate the theory of *what* RP is into action. The following section therefore offers a critical review of the models and frameworks associated with RP, which illustrate the processes and components represented within the text ahead.

### 2.5 Models and frameworks of RP

Reflective models and frameworks are said to represent the reflective process (Tate, 2013) and can be used to guide the RP process to achieve various outcomes (e.g., to confirm one's understanding, to improve a practical skill, or for the purpose of evidencing learning within a curriculum/education setting). Authors have recognised that different categories of reflective models exist. For example, Ghaye and Lillyman (1997) previously outlined five types of reflective model: *structured* (e.g., Johns, 1994), *hierarchical* (e.g., Mezirow, 1981), *iterative* (e.g., Gibbs, 1988), *synthetic* (e.g., Louden, 1991), and *holistic* (e.g., Ghaye & Lillyman, 1997). However, more recently and perhaps more simply, Mann, Gordon and MacLeod (2009) argued that only two dimensions exist to reflective models; those where RP is triggered by an experience and result in new understanding and possible change to future action otherwise called *iterative* models (e.g., Boud et al., 1985; Schön, 1983), or those which include a *vertical* dimension (e.g., Dewey, 1933; Boud et al., 1985; Mezirow, 1991; Moon, 1999), thus suggesting that different levels of reflection exist, from descriptive or superficial initial levels developing to that of deeper, more critical levels of reflection.

A lack of clarity is also evident when exploring the terminology used to describe some of these processes mentioned here, particularly referring to the terms *model* and *framework*. Such terms are used interchangeably, whereas some would argue they are conceptually different. According to Rolfe et al. (2011) *models* refer to the broad philosophical theories and assumptions that underpin a particular approach to reflection, whereas he argues *frameworks* are specific methods or approaches that provide help and guidance (e.g., cues or headings) for reflecting within a chosen model. For example, an individual might underpin their RP with Kolb's *model* of experiential learning (e.g., the process of making sense of an experience and using that sense making to improve future action) and then facilitate the *reflective observation* and *abstract conceptualisation* phases with John's structured *framework* for RP.

Reflective frameworks are used to facilitate reflection (and sometimes RP), often providing a visual representation of the processes required to engage in RP. These frameworks may be beneficial for novice reflectors in visualising the process and supporting 'movement' of reflection facilitated by prompts or the answering of questions. Self-supported or individual reflection using frameworks can be beneficial; however, they are not without limitation (see table 2.1 for critical overview). For example, Driscoll (2007) stated that a *framework* can be useful to initiate reflection, but contrastingly can also stifle creative thinking, especially for more experienced reflectors. Similarly, Johns (2004) outlined that frameworks can hamper or constrain ones *understanding* of reflection, where experiences can be fit to a defined process or framework rather than using it to facilitate or guide within a context. Additionally, a lack of appreciation for context can result when using iterative reflective frameworks, which can limit *breadth* and *depth* of reflection, thus leaving "little scope for practitioners to draw on their own intuitions, values and priorities" (Finlay, 2008, p. 9). One example of this could be when using the Gibbs cycle to reflect on a highly complex or multifaceted situation, which may not be explored in critical detail if simply following the six stages offered, because these stages do not specifically question the impact of others or the context in which the situation took place. Conversely, it could also be argued that RP breadth and depth could be just as limited without the use of a framework. However, *tools* are available which do allow such appreciation, some of which are reviewed in the following section.

Most conceptual or theoretical models (and associated tools) adopting a vertical approach to reflection appear to have emanated from the work of Habermas (e.g., Van Manen, 1977; Mezirow, 1981; Kim, 1999; Taylor, 2000), which along with the work of Dewey (1933), is argued to be the backbone to the study of reflection (Moon, 1999). Habermas (1971) adopted a philosophical stance focusing on the development of knowledge, or 'knowledge constitutive interests'. These are represented in three forms: (1) those of a *technical*, empirical nature; (2) those relating more practically (*practical*) to social sciences and human behaviour; and (3) emancipatory interests, requiring *critical* enquiry so to understand more fully the self, and the context one finds themselves. Underpinned by Habermas' work, Van Manen (1977) went on to more specifically define three levels of reflection: *technical reflection* (e.g., focused on developing technical skills and competencies; linked with issues of efficiency, effectiveness and accountability); *practical reflection* (e.g., focused on uncovering personal meanings and understanding; consideration of gaining a deeper understanding of oneself); and *critical reflection* (e.g., focused on questioning 'taken for granted' thoughts, feelings and actions; reflection that

challenges ethical and moral values). Whilst this three-level approach has been most commonly reported in the literature (cf., Larrivee, 2008), others have suggested that more levels exist. For example, some have extended three levels into four, arguing that a level prior to engaging in reflection (non-reflector or pre-reflector) is important to acknowledge (Larrivee, 2008).

Table 2.1. Critical overview of iterative reflective frameworks

| Iterative frameworks | Brief description | Strengths | Criticisms |
|---|---|---|---|
| Gibbs Reflective Cycle (Gibbs, 1988) | • Six-stage cycle including a prompt at each stage<br>• Education<br>• Underpinned by Dewey and Kolb | • User friendly (Duffy, 2008)<br>• Based on ELT (Duffy, 2008)<br>• Supports individual reflection<br>• Supports technical reflection | • Does not account for reflection with others<br>• No closure (Jasper, 2003)<br>• But equally suggests no movement forward as only retrospective (Forrest, 2008) (e.g. hypothetical question: what ***would*** I do, not what ***will*** I do?)<br>• Does not support practical (Duffy, 2008; Jasper, 2003) or critical reflection<br>• Lacks appreciation for context (Finlay, 2008) |
| Model* of Structured Reflection (MSR; Johns, 1994) | • Linear<br>• Structured<br>• Questions / cues<br>• Nursing | • Recognises RP is not an orderly, step-by-step process<br>• Emanates natural sequences within practice settings (Palmer et al., 1994, p. 112)<br>• Questioning is key aspect of RP (of self and/or with others) (Edwards, 1999)<br>• Allows involvement with others / promotes conversation (Jasper, 2003)<br>• Can be utilised by novices or experts (Hilliard, 2006; Ip, Liu, Wai, et al., 2012; O'Callaghan, 2005)<br>• Encourages detailed understanding<br>• Updated frequently | • Questions are presented in a logical order suggesting completion in this way (Johns, 2004)<br>• Some argue best for novices<br>• Inefficient / time-consuming / lengthy / limits creative thinking (Driscoll, 2007)<br>• Use term reflection, not RP<br>• Does not consider future practice / impact<br>• Termed as a "model", not framework (see Rolfe 2011)<br>• Version 16 was published in 2013; confusion over which to use and suggests earlier versions may be less effective<br>• Lacks appreciation for context (Finlay, 2008) |
| The What Model* (Borton, 1970) | • 3 simple questions: *What? So what? Now what?* | • Simple<br>• Easy recall therefore no additional resources needed<br>• 'Now what?' in present tense encourages future planning | • Lacking in detail or prompts therefore could result in a surface approach<br>• Lacks appreciation for context (Finlay, 2008) |
| Driscoll (2007) / Rolfe (2011); *considered together here as very similar* | • Borton's (as above) but with added questions / prompts for each stage | • Questions elicit more depth at each stage | • Unlikely to be able to recall additional questions by memory so additional resource required |

*Johns and Borton use the term 'model' which the author argues would be more appropriate as a 'framework'

Moreover, Etscheidt, Curran and Sawyer (2012) provided an overview of some 'models' adopted within teacher education that all ranged from three to five levels (e.g., Valli (1990) suggested five levels: (1) technical reflection, (2) reflection on action, (3) deliberative reflection, (4) personalistic reflection, (5) critical reflection).

A view beyond this (but chronologically earlier) came from Mezirow (1981) who suggested the reflective process included seven levels: (1) reflectivity; (2) affective reflectivity; (3) discriminant reflectivity; (4) judgmental reflectivity; (5) conceptual reflectivity; (6) psychic reflectivity; and (7) theoretical reflectivity. However, later writings (and the more commonly cited version) reported fewer levels (e.g. Mezirow, 1991). For example, more recent authors (e.g., Kember, 1999; Kember et al., 2000; Mann et al., 2009) refer to Mezirow's (1991) four levels of reflection (e.g., habitual action; thoughtful action / understanding; reflection; and critical reflection); whereas other authors (e.g., Wong, Kember, Chung, & Yan, 1995) reported three levels or categories from using Mezirow et al.'s (1990) *non-reflector*, *reflector* and *critical reflector* conceptualisation where 'non-reflector' referred to both 'habitual action' and 'thoughtful action'. The suggestion of a 'non-reflector' level was also later reported in Larrivee (2008) who described four levels of reflection as: (1) pre-reflection; (2) surface reflection; (3) pedagogical reflection; and (4) critical reflection. Therefore, the theme of confusion also remains through different interpretations of reflective levels within the literature (Mann et al., 2009).

Whilst different views on the range of levels associated with reflection may exist, what is common within published literature is that the deepest form of reflection is said to be that of a critical nature, which encompasses the highest order thinking and analytical processes, incorporates or appreciates ethical and moral dimensions, and consideration of social or political influences and personal values. This highest (or deepest) level of reflection according to Moon (2004) is typically underpinned by the following assumptions: consideration of bases of judgement or frames of reference (e.g., 'perspective transformation'); a critical lens (of both self and others); better quality learning; increased self-awareness; and an ability to manage, understand and accept emotions. In addition, Moon also contested that deep reflection logically has no end point, but in fact is only limited by external factors (e.g., word counts for written assessment purposes; time constraints). Such assumptions have been examined in empirical studies, perhaps based on earlier calls from those who recognised a dearth of empirical evidence with regard to reflection in learning settings (e.g., Wong et al., 1995). One example came from Pultorak (1996) who examined the developmental process of reflection in novice teachers. Underpinned by Van Manen's (1977) three-level conceptual framework, assessment of reflective

journals and reflective interviews elicited an increase in the level that participants were able to reflect at (at levels 2 and 3) between the start and end of the project. This study, however, given its cross-sectional design, did not provide any correlation or link to actual teaching practice, or examine the influence of reflective levels on such practice outcomes (e.g., whether improved reflective levels enhanced teaching practice). Much later, Pultorak and Barnes (2009) countered this by correlating levels of reflection with teaching evaluations, finding that both written and verbal reflection scores were significantly related to teaching performance. These findings indicated that the level of an individuals' reflection can directly influence teaching performance and support the promotion of activities that enhance ongoing RP. Whilst Pultorak and Barnes' findings are positive, some caution must be applied given the potential subjectivity involved in judging and evaluating participants level of RP using an assessment tool. With that said, adopting a levels approach has indeed afforded the opportunity to quantify and measure such phenomena that would otherwise prove very difficult, and such subjectivity can be alleviated via triangulation processes to ensure rigour and trustworthiness within the data (Lincoln & Guba, 1985).

Other approaches to the measurement of RP via a levelness approach have been adopted. For example, alleviating challenges in accessing certain populations and outcome measures of performance, some authors have constructed measures or questionnaires to assess one's ability to reflect at different levels, including Kember et al. (2000) and Sobral (2000; 2001; 2005). Considering the potential in judging or assessing reflective levels, Kember and colleagues (2000) built on a previously developed coding system for assessing levels of reflective thinking within written journals and developed a more accessible tool (Questionnaire of Reflective Thinking; QRT). Four subscales were included, based on Mezirow's conceptualisation: (1) habitual action; (2) understanding; (3) reflection; and (4) critical reflection. Using this tool, students ($n$ = 303) engaged in a variety of health courses were found to exhibit habitual action (level 1) and critical reflection (level 4) least frequently, which are said to be the least and most analytical levels of thinking, respectively. No statistically significant differences in reflective thought were observed between different discipline groups (occupational therapy, physiotherapy, radiography and nursing). However, statistically significant differences were observed between undergraduate and postgraduate students on all four subscales; with the latter, more experienced student group more likely to use deeper forms of reflection. Whilst Kember et al.'s (2000) results appear to infer that reflective thinking increases with experience, the use of self-report tools is not without criticism. Additionally, as recognised in studies adopting the QRT (e.g., Lim, 2009), or other self-report scales, there may be issues with over-

or under-estimation of one's perceptions when asking participants to judge or rate their abilities against various statements, an exercise that arguably requires both self-awareness and understanding to ensure accuracy and reliability of using such measures. Lim (2009) specifically found that year one students perceived themselves as higher in reflection (level 3) and critical reflection (level 4), and year three students rated themselves higher on habitual action (level 1). However, as understanding of reflection and/or critical thinking skills improve in students, perhaps they become more aware (and therefore critical) of their weaknesses, which maybe evidenced in such perceptual data, confirming that reliance on self-report data alone is not a sufficient research design. Additionally, studies adopting cross-sectional designs also do not represent how reflective thinking and levelness changes over time.

### *2.5.1 Models and frameworks in the sport literature*

The previously reviewed frameworks and tools have begun to transfer into the sport literature and research concerning RP. This section will outline some of the key literature regarding iterative and vertical frameworks of reflection in sport, and how these have developed to the present day.

Research within sport has explored levels of reflection, including sport coaching (Knowles et al., 2001; 2005; 2006), sport psychology (Anderson et al., 2004; Cropley, Miles, Hanton, & Niven, 2007; Knowles et al., 2007) and more recently, athlete populations (Jonker et al., 2010; 2011; 2012). Within their study, Knowles and colleagues (2001) assessed the reflective levels of coaching students pre- and post-placement experience using a hybrid framework based on the work of Mezirow (1981), Goodman (1984) and Powell (1989) to assess interviews and reflective reports for levelness. Of the eight coaches involved, the depth of reflection increased within five, one participant demonstrated a slight decrease, one stayed the same and one presented an incomplete data set. Participants were re-interviewed within a subsequent study (Knowles et al., 2006) that, using the same reflective framework, reported declines in reflective levels over time similar to those reported elsewhere (e.g., Jensen & Joy, 2005). Explanations for this decrease included a potential lack of accountability in the participants respective graduate roles where they were no longer required to reflect formally compared to their time as undergraduate students where reflection was facilitated and embedded within assessments. Such lack of support for reflective activity in coach education programmes was earlier reported by Knowles et al. (2005) and thus a lack of transferability from sport coaching education in HEIs into practicing coaching roles exists.

Within a sport psychology context, it could be argued that CPD requirements are much more formalised than in sport coaching and therefore such disconnects are less common. This is highlighted by Anderson and colleagues (2004) who informed readers about the (then) recent inclusion of RP as a competency to the BASES Supervised Experience and Accreditation Criteria in 2002 for Sport and Exercise Psychologists. This requirement to reflect and its perceived value in this domain saw Anderson et al. (2004) develop an existing framework from Johns (1994) into one tailored for use by sport psychologists. This was subsequently utilised by Cropley et al. (2007), who as a trainee sport psychologist (first author) new to RP felt that structure and guidance was important and that "…using a structured method gave me the chance to identify the specific information, thoughts, and feelings that would allow meaningful reflection. In this way, the model allowed me to systematically reflect" (p. 480). Knowles et al. (2007) adopted a similar approach, providing some illustrative reflections of a trainee sport psychologist embarked on the same BASES programme as those in Cropley et al.'s (2007) work. However, the trainee in Knowles et al. (2007) utilised the Gibbs framework, but unlike Cropley et al. (2007), no rationale was provided for why this particular framework was adopted which if included, may have helped readers and other trainees in deciding which framework to adopt for their own RP. Furthermore, alongside the trainee's reflections Knowles et al. (2007) offered the supervisor's perspective, who was able to provide their (reflective) view to supporting a trainee sport psychologist in developing their own reflective practices. An overarching framework for such supervision was also provided in illustration. Similarly, Woodcock, Richards and Mugford (2008), also focusing on the supervisor-supervisee dyad, utilised Boud et al.'s (1985) reflective framework to facilitate a learning process as a neophyte sport psychologist, which involved three stages: (1) revisiting an experience paying attention to associated feelings; (2) evaluating the experience exclusive of feeling and emotion; and (3) making a commitment to change. However, like Anderson et al. (2004), Woodcock and colleagues also made some adaptions by using additional prompts, akin to the questioning approach of Driscoll (2007) and Rolfe (2011) (e.g., what happened, so what, what now), which could suggest that there is scope for improvement/or a deficit in the original representation from Boud et al. (1985), or that it did not fit the context of sport.

The literature focusing on frameworks utilised within the sports psychology literature thus far have all adopted a qualitative, self-reflective approach; some discussing the value of RP in sport or suggesting a sport-specific framework (e.g., Anderson et al., 2004; Knowles et al., 2007) and others demonstrating RP in action (e.g., Cropley et al., 2007; Knowles et al., 2007; Woodcock et al., 2008). Whilst these

are informative, valuable, and positive for the field where such literature was lacking, an alternative view could be that of subjectivity, bias and limitation, where such experiences may not always be or feel so positive. Therefore, providing support from a more quantitative perspective through a “levels” approach (vertical framework) could assist in objective measurement of some of this perceived benefit in a sport practitioner context. However, given the paradigm of RP, and its appreciation for personal experience in the learning process, a combination of such approaches may be the most appropriate avenue to further explore RP within the practitioner domain of sport.

An argument to consider in future research, if incorporating a vertical approach to assessing or measuring reflection, is that of hierarchy, previously raised by Knowles et al. (2012). In their paper, which demonstrated critical levels of reflection in an experienced sport psychology practitioner (as opposed to the many published focusing on neophyte or trainee practitioners), Knowles et al. (2012) discussed that higher levels of reflection (e.g., critical) are deemed, by some, to be superior than lower levels (e.g., technical and practical). This poses a particular concern when judgement of RP is required (e.g., for assessment purposes), when some individuals may be unable to attain or demonstrate higher levels of reflection, particularly when the underpinning skills required for RP are lacking, or when certain experiences do not allow for critical or higher reflection (e.g., assessing the efficacy of a particular intervention in achieving its purpose). For example, students or trainee practitioners could be more appropriately asked to demonstrate *different* levels of reflection, rather than striving to achieve critical reflection as the end-goal, which may be achieved through the promotion of different RP methods. Therefore, whilst vertical frameworks of reflection and their associated tools or rubrics offer a useful mechanism (e.g., for research purposes), such an approach to reflective levelness within education settings or professional training schemes when used for judging reflective competency or ability is problematic given that not everyone has the ability to achieve the highest (or deepest) levels of reflection based on a skills deficit. In addition, as highlighted by Knowles et al. (2001), not all situations allow an opportunity to reach critical reflection, hence providing a further rationale for not relying on levels-based RP frameworks in settings where individuals could be penalised beyond their control or ability. Consequently, further training for those assessing and judging reflective evidence is therefore warranted, particularly given such ambiguity in understanding RP still also exists in domains outside of sport (Koole et al., 2011).

## 2.6 Approaches, techniques and methods of RP (non-sport)

Regardless of the definition adhered to, or the model/framework adopted (if at all), there are several approaches to RP discussed within the literature and it is evident that a variety of techniques and methods can be utilised to facilitate the process of RP. For example, within a health and social care context, Norrie, Hammond, D'Avray, Collington and Fook (2012) summarised RP methods as summative or formative. Here, summative methods (named so because of the *output* associated with such RP methods) included portfolios, diaries, autoethnographical stories, critical incident reports or essays. Alternatively, formative approaches referred to *process* oriented methods, such as in-class exercises, facilitation using frameworks or models, critical friends, supervision, mentors, peer observation or guided self-reflection. More succinctly, Greiman and Covington (2007) suggested the categories of *written reflection*, *verbal reflection* and *self-reflection* within teacher education. This section aims to examine existing and commonly used modes of reflection, firstly in domains outside of sport, but also those discussed within the sport context.

***2.6.1 Written vs verbal.*** Written methods of reflection have been reported to provide a safe outlet for thoughts and feelings, a permanent record of reflections, a link between students and instructors (where applicable), and to aid one's internal dialogue (Spalding & Wilson, 2002). However, Greiman and Covington (2007) explored trainee teachers' reflective modality preferences, finding that verbal reflection (56.1%) was more preferred than written reflection (14.6%). Nonetheless, participants reported a range of benefits from reflective journaling such as: an aide to reflective thinking and pedagogical problem solving; records of happenings; expression of feelings and stress relief; and awareness of professional growth. Alternatively, the most frequently reported barriers to journal writing were: finding time to write; other priorities; deciding on the content of the written entries; writing not being a preferred method; and issues with confidentiality. Nurse practitioners have also reported similar benefits to written approaches to RP, such as increased confidence and assertiveness (Glaze, 2001).

Other research has considered the benefits of verbal reflection. For example, Platzer, Blake and Ashford (2000a) reported that verbal reflection: increased professionalism; provided greater autonomy in decision making; encouraged more self-confidence to challenge the status quo and make one's own judgements; and that verbal approaches were perceived to be less rule-bound within nursing practice. However, Platzer et al.'s (2000b) participants likewise highlighted barriers to this method of reflection, which included: a lack of commitment; student resistance to

shared learning or to take responsibility for their own learning; and an unwillingness to expose themselves to the judgement of others.

Further comparison of verbal and written reflection was observed by Pultorak (1996) who found that verbal reflection (through reflective interviews) elicited more reflective growth than written reflective procedures (reflective journals, with progressively reduced structure over three versions). Whilst appearing favourable, *verbal* reflection (in this case) was also a *shared* approach (as opposed to an *individual* one), therefore making it difficult to generalise that verbal methods are better than written methods *per se* (given the additional facilitation that took place). In addition, the *verbal* reflection procedure in this study took place after three consecutive *written* reflection procedures, therefore an order effect could indeed be possible.

A similar methodological issue is observed in Lee's (2005) research, which, whilst reporting that levels of reflective thinking (or depth) differs depending on the mode of reflection used, proposed that additional facilitation was involved when verbally reflecting compared to the written (individual) efforts. To address this potential issue, future research might compare written reflections against a comparative individual version of verbal reflection (e.g., using an audio recording device), which would allow a more appropriate interpretation to take place. Studies which have only investigated a single mode of reflection limit the ability to objectively critique such methods (e.g., Epp, 2008; Spalding & Wilson, 2002). Therefore, those adopting mixed or multiple methods of reflection perhaps add more to the field of knowledge in this area. However, care must be taken to ensure that such comparisons are valid and interpreted correctly for the readers and users of such research in practice settings.

Extrapolating to real practice settings, time is often discussed as a barrier to written reflection, when it is often not possible to sit and write 'in the moment' reflections for those in busy, high-pressured, dynamic situations. Conversational techniques of reflection may thus be more appropriate, or complimentary to other techniques, where solutions and decisions need to be almost immediate (e.g. medical and nursing situations especially). However, such possibilities may also be viewed contrarily from an *individual* or *shared* perspective, which will be discussed next.

***2.6.2 Individual vs shared.*** 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, Liles, Conduit and Price (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., 2000a). However, Francis, Owens and Tollefson, (1998) in their study utilising group-based reflective practice within nursing students to develop professional philosophies, also contended that assumptions that all individuals in group settings will have the desire or skills to engage in such critical inquiry are inappropriate, as mixed results were observed (e.g., some participants felt immediately comfortable in a group reflection setting, whereas others did not and struggled).

In a phenomenological study on registered nurse experiences of reflection in daily practice, Gustafsson and Fagerberg (2004) provided descriptions from four nurses about both individual and shared reflection. Whilst both perspectives appear to be positive, no specific differences between individual and shared reflection were explored. Many other articles (already mentioned) have highlighted that a considerable overlap exists regarding such categorisations of reflective modalities. For example, *written* reflection most often falls into the category of *individual* reflection. However, *verbal* approaches (such as reflective conversations and reflective groups), adopt a default position of a *shared* approach. Methods which sit outside of this default multiple classification conundrum include *individual verbal* approaches (e.g., audio recordings, video diaries, vlogs, or oral [reflective] presentations) and *shared written* approaches (e.g. reflective email conversations, feedback on written reflections).

***2.6.3 Formal vs informal.*** The classification of formal and informal modes of reflection are more difficult to categorise than those discussed thus far, which appear objective and obvious. However, an element of subjectivity appears to exist when exploring the literature on formal and informal methods of reflection. For example, a popular and practical reflective method utilised in the literature is a reflective journal/diary. Reflective journals can be defined as, "written documents that students (or others) create as they think about various concepts, events, or interactions over a period of time for the purposes of gaining insight into self-awareness and learning" (Thorpe, 2004, p. 328). Diaries/journals have also been recognised as helping to maintain audit trails of reasoning, judgement, and feelings, promoting an internal dialogue for analysis and increased understanding (Smith, 1999). Whilst a reflective journal might *informally* provide a personal process of catharsis or record keeping, it can also be used as a *formal* method of assessment within educational settings, in order to promote evaluation of experience and learning (Richardson & Maltby, 1995).

A formal approach to RP, therefore, may be one that is related to an educational *assessment* or to the demonstration of a competency working towards a professional qualification (e.g., BASES, SENr) by way of *evidence*. However, Mackintosh (1998) argued that formally assessed reflections can lead to students providing reflections based on what they believe respective tutors want to see, rather than a true reflection, which consequently can undermine the learning process intended by the assessment.

### 2.7 Approaches, techniques and methods of RP (in sport)

Specifically, within the sport-related literature (up to the end of 2012), several techniques and approaches have been introduced to illustrate RP. Approaches include: journals, reflective groups, reflective conversations, and tape-recorded narratives (Telfer & Knowles, 2009). Additionally, autoethnography (e.g., Purdy, Potrac, & Jones, 2008; Rowley, Earle, & Gilbourne, 2012), confessional tales (e.g., Gilbourne & Richardson, 2006; Larsen & Engell, 2013) and personal reflections (e.g., Collins, Evans-Jones & O'Connor, 2013; Morton, 2009) have been frequently evident within sport-related publications.

***2.7.1 Written and conversational approaches in sport.*** Professional training frameworks (e.g., BASES, BPS) often require evidence of engagement in reflection (as opposed to assessment of reflection as seen in educational settings) and therefore the most traditional format of providing this is through written approaches (which could also be classed as shared or individual, or formal or informal). Written reflections are thought to allow practitioners to make better sense of their experiences by being able to 'view' their experiences in front of them (Cropley et al., 2012). Much of the reflective literature in sport demonstrates written reflections, which often aim to share personal and practical experiences and lessons learned with the reader (e.g., at technical and practical levels). Others have used reflective writing to delve more deeply and critically into their experiences, exploring wider implications, values and beliefs, all underpinned by theoretical conceptualisation and acknowledgement of epistemological approaches (e.g., Knowles et al., 2012; Morton, 2009).

Knowles et al. (2001) explored both written and conversational methods of reflection with trainee coaching students as participants from a more empirical investigation. Whilst reflective ability appeared to improve over the period of the structured programme, the study did not examine specific differences between such modes of reflection and therefore one method cannot be deemed more helpful than another in this case. Limited examples of verbal reflection have been examined within sport settings. The closest examples are those where interviews or focus groups have

been utilised (e.g., Cropley et al., 2010a). However, as previously stated, it is difficult to ascertain how beneficial this *verbal* method is if it has not been a specific focus of the study, and in addition, multiple factors could be involved (shared reflection as well as verbal reflection).

***2.7.2 Individual and shared approaches in sport.*** Whilst benefits to individual reflection have been explored earlier in this review (outside sport), limitations of 'solitary' RP 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). In light of this, Manley and Meijen (2009) provided support for shared RP as 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 RP. 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 limitations suggested above of solitary RP (Knowles et al., 2012).

Further examples of shared RP are observed through the supervisor-supervisee dyad (e.g., Knowles et al., 2007; Woodcock et al., 2008) and, although not focusing on the practitioner *per se*, within practitioner-athlete relationships. For example, Faull and Cropley (2009) documented the use of reflection within an applied sport psychology support setting, whereby reflection was utilised as a less traditional intervention approach in order to support a triathlete whilst away at a competition where access to a sport psychologist was not possible. Here the athlete was advised to maintain a structured reflective diary, producing daily written entries during a 30-day event. Benefits to this process were identified by the athlete, reporting that RP helped improve their self-awareness, become more rational when evaluating performances, and changing focus at times from being performance to more process/technically orientated. Key to this dyadic process was educating the athlete about the benefits of RP to ensure engagement with the RP process. The use of a *shared* and *written* approach here is quite novel but a process similar to that observed in Knowles et al.'s (2012) work, where RP diary extracts from an experienced sport psychology practitioner were used to illustrate what critical RP can look like. The diary author specifically highlighted that the diary enabled "increasingly deeper levels of understanding of personal, professional and interpersonal relationships individually and how they interact" (p. 462). The other two authors adopted an "external critical

friend" approach, where staged and layered reflections allowed "multiple explorations of thoughts and feelings, sense making and perhaps offering alternatives for action at the latter stages of the reflection cycle" (p. 466).

***2.7.3 Informal and formal approaches in sport.*** Several examples of formal reflection are evident within the sports literature (e.g., Carson, 2008; Knowles et al., 2001; Stambulova & Johnson, 2010). Knowles et al. (2001) analysed written reflective reports as part of a compulsory assessment for levelness of reflection. An alternative formal assessment method used by Carson (2008) was a reflective report based on students' self-reflections on a video recorded coaching session they had personally delivered. This was supplemented with an open-ended questionnaire about their experiences of reflection. Here, students only reflected on a single episodic case, whereas Knowles et al. (2001), with a similar participant population, focused on a longer duration placement period where development/change in RP could be explored over time. Additionally, within Carson's (2008) work, an opportunity for further questioning (as afforded by the interviews in Knowles et al.'s study) was not possible using the methods adopted.

Stambulova and Johnson (2010) focused on a different type of formal reflection, which as opposed to a student population, examined reflective reports from trainee sport psychologists and thus a more advanced, professional setting that provided an insight into the RP of novice consultants working with athletes. Another 'formal' type of RP could be argued to be reflections written or edited for publication, often subject to a peer-review process. Such examples include published 'confessional tales' or autoethnographies which, although having their own methodological characteristics could be argued to be an informal-formal fusion of reflection. However, Knowles et al. (2012) argued that these writings often do not demonstrate true reflection (or RP) by definition, thus creating potential confusion in the literature that may be used to shape future writings and genres within the field. That said, examples demonstrating how informal (and somewhat personal) RP could be transitioned to a formal approach, and for a different purpose (in this case, formal publication) are available (e.g., Knowles et al., 2012).

More informal examples of reflection are evident in those utilising extracts from reflective diaries, often demonstrating content, level and utility of one's reflection (Cropley et al., 2007; Knowles et al., 2007). Both sets of authors showed evidence of a neophyte sport psychologists' reflections, but Knowles et al. (2007) additionally offered examples of supervisor reflections, as well as offering a 'formal' framework for how various RP methods could be utilised, from individual, dual and group perspectives.

## 2.8 Summary of methods

Awarding and qualification bodies (e.g., BASES) have historically requested written evidence of reflection, but some literature suggests that verbal reflection elicits larger reflective growth (e.g., via discussion or interviews; Pultorak and Barnes, 2009). From examination of the literature up to 2012, across a range of domains including sport, there appear to be some reflective methods that are more commonly utilised and reported on. For example, *written* reflection is most often used, and additionally, most often falls into the category of *individual* reflection. However, more *verbal* approaches are infiltrating the literature (such as reflective conversations and reflective groups), but often adopt a default position of a *shared* approach. Whilst a variety of RP methods exist as evidenced in the present section, and whilst some research has attempted to explore how these differ in terms of efficacy in a variety of settings and populations, it seems very apparent that a unified approach is not a feasible approach. Consideration of individual preference and the purpose or goal of the reflection / RP is often overlooked in research settings, especially when exploring large sample sizes. Therefore, more research is needed to explore individual preference for the mode or technique of RP, as well as the overall purpose of the respective RP, utilising empirical research designs, without disadvantaging the agents involved in such processes.

## 2.9 Value of RP

Despite matter surrounding the concept of RP, it still appears to be one that holds value for practitioners, with most educational and development frameworks as well as professional standards now advocating RP. In addition, literature has started to become clearer in what such value actually is. For example, Ruth-Sahd (2003) conducted a critical analysis of data-based studies within nurse education, reporting that benefits of RP include: integration of theory and practice; increased learning from experience; enhanced self-esteem through learning; acceptance of professional responsibility and CPD; enhanced critical thinking and judgement making within complex situations (based on experience and prior knowledge thus enhancing patient care); empowerment of practitioners; increased social and political emancipation; improved practice through greater self-awareness; and the development of clinical knowledge and skills. Mann et al. (2009) further suggested that RP is amenable to development over time and with practice, and that it enables users to make sense of complex situations and learning from experience, as well as highlighting that a variety of RP methods are available for utilisation. More recently, Norrie et al. (2012)

summarised, that reflection is viewed as part of developing competent practitioners, it reduces the theory/practice gap helping to unearth tacit knowledge, and contend teaching reflection through a combination of theoretical and practical knowledge will ultimately help create a knowledge base for achieving safe and effective practice. However, despite the benefits observed in the literature in support of RP, there are sources that do still contend such value. Specific criticisms from Cornford (2002), for example, not only refer to the limited evidence base at that time, but also posed the wider debate of why RP became so 'fashionable' and accepted without such an evidence base. Cornford argued, earlier supported by Houston (1996), that all new paradigms should be assessed in an empirical way before there is widescale adoption. Furthermore, Cornford (2002) argued that:

> It is time we stopped assuming that all students, even adults, are in possession of effective cognitive skills that develop naturally and without the need for specific teaching. As with all skill learning, regardless of whether it involves performance skills or cognitive skills, there is a need for programmes that train for the desired skills. This must involve modelling of the skills, and involve considerable practice and feedback. (p. 232)

***2.9.1 Value within sport.*** Although the literature base within sport is cumulatively less to that of other domains such as nursing and teacher education, the value of RP has still been discussed considerably within a sports context. Discussions have focused on a lack of empirical evidence for the value of RP aligning with those arguments outside of sport. Within sport coaching, value of RP has been discussed from both novice (Knowles et al., 2001; 2006) and expert perspectives. Cropley et al. (2012) reported increases in self-awareness, (e.g., strengths, weaknesses and confidence levels), greater understanding of coaches' own and others' practices, as well as improvements in actual practice as evidenced by challenged norms and changes in decision making from engaging in RP. Within sport psychology, others have noted value in reading others' self-reflections on neophyte sport psychology practice, allowing others (e.g., future and current practitioners) to understand more about practice experiences (e.g., Cropley et al., 2007; Knowles et al., 2007, 2012; Woodcock et al., 2008). Other benefits of RP include increased awareness of strengths and weaknesses, and reflective meetings with others helped to move from "apprehension to anticipation", thus increasing confidence (Knowles et al., 2007).

Cropley et al. (2010b) previously argued that evidence of reflection was limited in qualified or accredited practitioner populations. However, since the BPS Sport and Exercise Psychology Review (SEPR) special edition of reflections on sport psychology provision in Athens, where the narrative began to provide recommendations for 'in-event' psychologists working towards future events and

substantiates claims over the value of reflection in providing a source for learning and development within ASP, more examples of such reflections have begun to penetrate the literature base in this domain. For example, Knowles et al. (2012) demonstrated experienced practitioner reflections also written whilst providing support at an international sporting event. One specific quote highlighted the perceived value of RP from an experienced practitioner perspective:

> I value reflective practice, but feel I have sufficient experience not to need a daily log. However this could be a degree of complacency and a rationalization used by more experienced practitioners to excuse not doing something that is considered "good practice." (p. 460)

### 2.10 Summary

RP is deemed to be important for professional training frameworks and the maintenance of standards across domains outside of sport (education, nursing etc.) and has recently become more widely recognised in the sport practitioner literature and applied field. However, whilst there are examples of good practice reported upon, such as evidence-based research, demonstrations of novel techniques and methods, and the development of RP, there remains many gaps yet to be filled in moving this area of knowledge and practice forwards, particular within a sport and exercise science domain. Such specific gaps include a limited empirical research base within a sport and exercise science setting. Furthermore, no longitudinal research exists within a sport practitioner setting, exploring how RP is developed over long durations. There is also limited exploration of trainee practitioner perceptions and experiences of RP, even though engagement in the process is compulsory in some settings (e.g., BASES SE). No literature (to date) appears to have considered individual preference for the mode of RP within a sport setting and the potential impact that particular RP approaches could have on subsequent RP engagement. Finally, to the authors knowledge, no research has yet considered any of the above alongside the purpose or rationale of the RP being undertaken.

### 2.11 Aims & Objectives

The specific aims of this thesis are:

1. Critically explore (current) knowledge, understanding and engagement in RP in the domain of sport.
2. Examine the international landscape of RP within educational and professional development settings in sport psychology.
3. Explore the RP experiences of BASES SE supervisors and reviewers.
4. Evaluate the impact and role of the BASES RP workshop.

5. Longitudinally plot the development of RPs in trainee sport and exercise science practitioners.
6. Provide recommendations for research, practice and professional training frameworks in sport and exercise science regarding RP.

The above aims will be achieved through the following objectives:

- To systematically assimilate, analyse and present the sport-specific RP literature published between 2001-2012
- Using a formative research design to explore
    - international practitioner experience of RP and their perceptions of associated training needs
    - current BASES supervisors and reviewers' perspectives on their experiences of RP to the present day
    - summarised delegate evaluations from recent BASES RP workshops in order to ascertain the barriers and enablers of RP CPD in a workshop setting
- Provide a contemporary RP literature update by systematically assimilating, analysing and presenting the sport-specific RP literature published between 2013-2018
- To longitudinally plot trainee/neophyte sport scientist development of RP utilising a mixed methods research design over a period of BASES supervised experience (SE).

# Chapter Three

# Methodological Framework within Thesis

## 3.1 Introduction

This chapter aims to provide a methodological overview of the thesis and my philosophical position as a researcher. This includes a background to the research in terms of the paradigmatic assumptions and methodological approach. Specific details about research design and methods, as well as data analysis techniques can be located in the respective chapters.

## 3.2 Research paradigms

According to Sparkes and Smith (2014) research is aligned, either implicitly or explicitly, to the researcher's values and beliefs about the nature of the world and their position within the world, which collectively combine to form a researcher's paradigmatic position. Exploring the notion of paradigms (e.g., a belief system and theoretical framework containing assumptions about ontology, epistemology and methodology; Fraenkel, Wallen, & Hyun, 2012) is an important consideration for researchers as it explains to the reader the set of basic beliefs, and a worldview that defines, for its holder the nature of the world, ones place in it, and the possible relationships we have with this world and its parts (Sparkes, 2015). Under the auspices of paradigms, these values and beliefs are further conceptualised according to ontology (the nature reality), epistemology (the nature knowledge) and methodology (how can we access that knowledge). Therefore, when considering the nature of reflective practice and learning and how best to develop a rigorous research design, making sense of paradigms provides an important aspect of the research process. However, considering how to position this research according to overarching paradigms was challenging, mainly because within the sport and exercise science literature, this type of discussion is often occluded and research falls under either positivism or constructivism (or interpretivism). Furthermore, the majority of my undergraduate degree was taught according to positivistic understandings undergirded by an objectivist ontology (a single reality independent of our knowledge), an empiricist epistemology (reality can be measured) and methods that can produce statistical causal outputs (Tracy, 2013). As such prior to undertaking the PhD journey I resisted any engagement with constructivism with its relativist ontology (multiple contextual realities exist), subjectivist epistemology (knowledge is subjective) and qualitative methodologies (Tracy, 2013). The next section, therefore, explains the journey of moving beyond my initial positivistic worldview within the research process (from that of undergraduate studies) to develop the philosophical stance that shaped this research project from conceptualisation to dissemination.

### 3.3 Reflections on the genesis of my worldview

My academic journey could be considered, in equal measure, as one of resistance, discovery, challenge and change. Indeed, my initial learning whilst immersed within a three-year undergraduate degree in sport and exercise science, instilled an aptitude and passion for positivistic methods of enquiry. During these early experiences I never questioned or was questioned about my ontological and epistemological beliefs. As such, prior to commencing this PhD journey, I recall attending an internal research CPD session whereby discussions about methodological choices and Thomas Kuhn's (1970) book about 'paradigms' seemed rather alien. I felt as though I was listening to a foreign language and like I didn't belong. Leaving the workshop insecure about my ability, I couldn't help thinking, "If this is the requirement for a PhD, then maybe this isn't the right path for me" and so I resisted extending the boundaries of my knowledge.

At a similar time, an opportunity to undertake BASES Supervised Experience arose through a personal contact and the desire to focus on sport science training made intuitive sense. I thought that maybe becoming a practitioner was the best way forwards for me. However, it was not long into my BASES SE journey before I had to engage in regular shared RP as part of our group of trainee practitioners. It seemed the resistance to extend my learning beyond the lens of positivism was futile as our supervisor encouraged us to share experiences and to critique and challenge these experiences during each of our SE group meetings. Initially, these sessions were met with scepticism as I lacked knowledge and understanding and didn't know how to apply reflective practice prior to commencing BASES SE. Indeed, reflecting back, my early "reflective sheets" - submitted as 'evidence', were highly descriptive, focusing on the technical, controllable aspects of practice, and lacked any real criticality.

Whilst engaging in the process of RP, which was superficial at best, I soon recognised after a few meetings, that I looked forward to listening to the experiences of my peers and also sharing my own. During these meetings we were encouraged to openly share about significant challenges we faced as trainee practitioners and the impact this had on our emotions. These times of sharing for me were often a cathartic experience. Here, discussing potential solutions to problems or sometimes, simply receiving reassurance and empathy about the actions I'd taken, became a source of learning and development that boosted my confidence. I was beginning to recognise that my ontological security was being challenged as I discovered the importance of understanding individual and shared learning experiences. Subsequently, my thinking towards RP began to change as I became more aware and appreciative of new and differing ways of thinking and experiencing the world I shared with others. I remember

feeling like a “light bulb” had been switched on and it was ok to think beyond my positivistic foundations. Such was the impact of these moments of enlightenment that a fellow BASES trainee and I decided to share our RP experiences at a national conference in 2010. This cumulated in the genesis of a ‘model of group reflection’ (Huntley & Kentzer, 2013), which highlighted the individual skills and group conditions we felt were required for the process to be successful. The positive response to our presentation resulted in us being asked to write this up for publication. I remember being “blown away” that what seemed to be a natural process of sharing experiences through RP could be an avenue for future research. Additionally, through the development of this publication I came to recognise the value of qualitative research as a lens through which I could communicate complex learning experiences. It was this moment that I realised that RP was an area I wanted to research further but I still had so many questions.

As I began to contemplate starting a PhD once again, armed with first-hand experience of the journey to becoming a SES practitioner, it seemed intuitive to explore RP within this context. Therefore, I took my list of questions about RP and the BASES SE process and met with Zoe (who later became my DoS) soon after the conference presentation. During this meeting, my concerns about moving from a positivistic philosophical core towards pragmatism and the use of qualitative research methods were alleviated. Although at the time I did not have the literacy to explain my research assumptions or beliefs, indeed, so much of what we discussed just simply made sense – that is, the need to explore RP and its development. I remember leaving the meeting excited that I had direction of travel and the prospect of learning something new no longer appeared an insurmountable prospect. Reflecting back, I cannot identify specifically what “it” was that brought about the assurance. Maybe I had matured since my earlier days of “not getting it”. Maybe I had become more self-aware after the group RP sessions. Maybe the topic area was more interesting to me, or perhaps I just ‘connected’ with Zoe. The reality is, it was likely to be a combination of all these things and I was excited to press on with conducting my research. Subsequently, Zoe as DoS recruited some other like-minded academics who were equally as passionate about RP, practitioner development and BASES, and this marked the start of my PhD journey.

### 3.4 My philosophical position

In commencing this research and amalgamating my experiences as a trainee alongside exploring the RP literature, I recognised that this complex phenomenon could not just be explained according to positivistic understandings. Similarly, in

wanting to evidence the impact of training on depth of reflection over time, I felt that constructivism and qualitative methods on their own could not provide the required objectivity (Morgan, 2014). Henceforth, I had to explore my worldview more deeply. In doing so, the paradigm of pragmatism started to make intuitive sense. That is, the practical needs of finding solutions to research questions and problems dictate the methods used in such research (Gibson, 2012). A view explained by Giacobbi, Poczwardowski and Hager (2005) as, “pragmatists opt for methods and theories that are more useful to us within specific contexts (e.g., answers to practical problems)” and “recognize that scientific inquiry is contextual in nature and that the past and current social, historical, and political conditions strongly influence the scientific process” (p. 21). Furthermore, pragmatism is based on the belief that “theories can be both contextual and generalizable by analysing them for transferability to another situation” (Creswell, 2009, p. 4), and has been described as breaking the boundary between positivist and constructivist approaches (Shannon-Baker, 2016). Therefore, when considering the ontological and epistemological underpinnings of these polarised paradigms, it becomes evident that pragmatism, emphasising shared meanings and joint actions, can indeed bridge the gap between the reported strengths and limitations reported or experienced from a unidimensional approach (cf. Morgan, 2007; Patton, 1990). Arguably, therefore, pragmatism can align with either of these traditional paradigms depending on the context. For example, pragmatists agree with constructivists in that research should involve reflection and consideration of practical, moral and ethical consequences of knowledge construction (Dewey, 1931). At the same time, pragmatists also agree that some level of objectivity can be achieved, whilst not allowing complete generalisation, but within a specific context (James, 1907). Thus, when considering the nature of RP, navigating such a continuum requires constant reflection on the application and implications “to ensure practical utility, social value, and fairness to anyone who might be or could be impacted by research findings” (Giacobbi et al., 2005, p. 23).

In accord with the potential efficacy of accepting paradigmatic balance, therefore, to answer the research questions posed within the present thesis, various research methods were utilised via a mixed method design underpinned by the philosophical assumptions of pragmatism. Whilst perhaps a point of tension for some (e.g., Sparkes, 2015), such an approach allows complementary data to be obtained from participants, providing both an objective quantification of change, as well as an understanding of individual subjective experiences (Jackman, Crust, & Swann, 2017). This was an important consideration in the current research as the complexity of RP, consisting of both *cognitive* factors such as levelness and depth (e.g., Kember et al.,

2000), which may be quantifiable but that also recognises that agential experiences are influenced by *contextual* factors (i.e. practitioners' experiences and knowledge of RP may be varied) that require richer explanations to illuminate quantitative data and in doing so help to explain the mechanisms of change (cf. Creswell & Plano Clark, 2018). To put this philosophical position into action, first, I consider the RP literature within the context of sport to ascertain a momentary view using systematic qualitative techniques (Chapter 4 and Chapter 6). Specifically, through conducting meta-syntheses, I provide a detailed insight into the international landscape of RP within two specific time periods. In addition, I also draw upon multiple perspectives of reality through the use of semi-structured interviews to explore individual experiences and perspectives of RP (Chapter 5 and Chapter 7). However, also within Chapter 5, I adopt quantitative methods to ascertain more objective truths about broader RP experiences of BASES supervisors and reviewers, as well as trainee SES practitioners. Quantitative methods are also utilised in the form of repeated questionnaires and analysed via linear mixed modelling within Chapter 7 to explore RP longitudinal development within a sample of trainee SES practitioners. Therefore, rather than seeking universal or objective truth, I illustrate the processes involved in exploring the engagement in and development of RP within a SES setting through multiple approaches.

### 3.5 Ethical considerations

It is important to acknowledge the ethical considerations pertinent to the present research and the associated methods utilised ensure trustworthiness is maintained. Such trustworthiness can be compromised if research participants act in ways that seem desirable to others, known as social desirability (Salkind, 2010). For instance, given the participants within the present research knew they were being studied, there was therefore a risk that individuals could provide data (via interview responses and/or written reflections) they believed the researcher wished to receive. Previous research has also expressed concerns about the risk of presenting socially desirable reflections within sport practitioner settings (e.g., Cropley et al., 2010). In order to minimise such risk, participants were assured, both via the informed consent process and verbally prior to any data collection, that all information provided would remain confidential. Additionally, to develop rapport and trust, participants were reminded of their right to confidentially, anonymity and right to withdraw prior to starting the interview. Furthermore, to maintain rapport throughout the interview, introductory questions were used to create a sense of familiarity and connection with the participants, and these were followed by the main body of open-ended questions

(Patton, 1990). Open-ended questions were used to establish a conversational approach with participants, and these were followed up with 'probes' to seek clarification, expand on their responses and where possible provide real-life examples (Patton, 1990). Additionally, active listening was also adopted where the use of encouraging prompts (e.g., you are doing well) and physical gestures (e.g., nods of the head) was used to maintain connection throughout the interview (Uphill & Jones, 2007).

Despite the desire to establish rapport between the researcher and participants, it was also important to acknowledge that power is ever present between all parties involved within the research process (Day, 2012). Therefore, both implicitly and explicitly, the way power is perceived and negotiated within the interview process could have implications for the level of rapport developed with participants, and consequently the depth of insight shared (Patton, 1990). Hence, in preparation for data collection – recruitment of and interviews with participants, I recognised that I may be viewed as either an 'insider' or 'outsider', based on the participants' position (e.g., expert or novice practitioner), respective specialism or discipline (e.g., sport psychology or physiology), as well as their experience of reflective practice (e.g., if experience was limited, I may have been perceived as an expert in this area). In other words, my position as a female researcher and academic may result in varied rapport experience due to the unequal amounts of power perceived to be held by both parties. Therefore, I felt it important to adhere closely to the methods and data collection processes outlined above, whilst at the same time remain reflexive throughout the research process to ensure trustworthiness was upheld. More reflections on this can be found at the end of the thesis (pp. 213-216). Furthermore, in an attempt to encourage participants to be as honest as possible and avoid socially desirable responses, participants affiliated with BASES were also assured that any dissemination of data would be via an executive summary, research report and/or peer reviewed publication whereby individuals would not be identifiable, nor would their responses impact their experience (positive or negative) within the organisation. Participants were too assured that written reflections were to be analysed for depth using a quantitative analysis tool as opposed to focusing on the qualitative content, thus again, encouraging honesty in the participants.

# Chapter Four

# Study 1: Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport (2001-2012)

### 4.1 Thesis Study Map

| Study | Objectives |
|---|---|
| **Study One: Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport** (completed 2013; published 2014) | • To assimilate, analyse and present the reflective practice literature within the sport domain |

The main outcomes of this study have been published in *Reflective Practice*:
Huntley, E., Cropley, B., Gilbourne, D., Sparkes, A., & Knowles, Z. (2014). Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport. *Reflective Practice*, *15*(6), 863-876.

I fulfilled the role as Principal Investigator in this research publication, designing the aims and methods, conducting the data collection and analysis and leading the write-up. The collaborating authors acted in the role of supervisors who supported the editing process during the publication phase.

### 4.2 Introduction

A practitioner can be described as a person engaged in the practice of a profession or occupation and in sport this may be, for example, a sport psychologist, a sport scientist or a coach. Over the last twelve years researchers have debated how these sport-based practitioners learn their craft, develop expertise, become effective within their roles and as a consequence have discussed reflective practice themes and processes (Cropley et al., 2010a). In one of the first discussions of reflective practice in sport science pedagogy, Knowles et al. (2001) noted that the development of expertise is "often acquired through a mixture of 'professional knowledge' based programs (e.g., academic courses or coaching awards) and practical experience within the sports setting (through supervised experience or in/post-course placement)" (p. 185). However, knowledge and experience alone are not necessarily enough to develop effectiveness in ever-changing environments where textbooks do not always provide solutions to real life problems.

The context of sports performance is dynamic and complex and thus requires practitioners to be flexible and progressive in the way they approach their work. Arguably, professional training pathways for sports practitioners should facilitate the development of such competencies and this responsibility often rests with governing or accrediting bodies. For example, the British Association of Sport and Exercise

Sciences (BASES), who accredit sport and exercise scientists in the UK, overview professional training opportunities and processes in these fields respectively. Other organisations exist in the UK and beyond also regulate professionals working within the sporting environment such as the British Psychological Society (BPS; UK), Association for Applied Sport Psychology (AASP; USA), and Australian Institute of Sport (AIS; Australia).

For the purposes of this paper, accreditation bodies within the UK have adopted practices and generic approaches to professional development influenced by practice from allied domains. According to Knowles et al. (2007) both BASES and the BPS have utilised the tenets of RP long established within nursing, health, education, and psychology disciplines (e.g. clinical, health, educational, counselling psychology). These allied disciplines share similar characteristics to that of sport whereby practice environments are multifaceted, requiring sport practitioners to develop both professional and craft-based knowledge, the latter being grounded in the day-to-day practical, context-specific experience (Knowles et al., 2001). Reflective practices whether at a technical, practical, or critical level (see Anderson et al., 2004), have been consistently identified as a key construct in enhancing the competence and effectiveness of practitioners within medical education (e.g., Gordon & Campbell, 2013), nursing (e.g., Kinsella, 2010), social work (e.g., Wilson, 2012) and clinical psychology (e.g., Binks, Jones, & Knight, 2013).

In an attempt to overcome some of the definitional issues associated with RP in the sporting domain, this chapter adopts the following understanding,

> "A purposeful and complex process that facilitates the examination of experience by questioning the whole self and our agency within the context of practice. This examination transforms experience into learning, which helps us to access, make sense of and develop our knowledge-in-action in order to better understand and/or improve practice and the situation in which it occurs" (Knowles, Gilbourne, Cropley & Dugdill, 2014, p. 10).

Similar to the historical debates in other professions, sport-based research to date has focused upon the underlying rationale, the utility, and the value of RP for practitioner development. As an example, these issues all feature in differential ways amongst a recent commentary on reflection around the elite sport setting, (Knowles et al., 2012). Here, the authors suggest that although RP features within the training and development curricula of BASES (2009) and BPS (2011), critique over the role and efficacy of reflective processes remain.

RP research in the sport domain is seen across a number of disciplines and levels of expertise. For example, neophyte or practicing sport psychologists (e.g.,

Cropley et al., 2007); sports coaches (e.g., Nelson & Cushion, 2006); and within a consultancy setting with athletes (e.g., Faull & Cropley, 2009). These authors have advocated the value of RP. However, the supportive literature drawn on by these authors to make such claims remains mostly theoretical or exploratory. Consequently, there have been increasing calls for empirical-based research to evidence the efficacy and impact of RP for practitioners or athlete development (Picknell, Cropley, Hanton, & Mellalieu, 2014). This suggests a 'slippage' of sorts between research and practice. Here, the currency of RP remains high within the contemporary applied literature and across training curricula, but little evidence is on offer to those designing training programs regarding the what's, when's and how's of reflective practice and how it might be developed within practitioner training pathways. Consideration is given here as to the gaps between theory and practice, as well as providing a more informed evidence-based view of RP which is perhaps pedagogically essential for the consumer (e.g., trainee or established practitioner, educator, athlete). In a similar vein, Mann et al. (2009) argued that little guidance was available as to how reflection and RP should be developed within a medical education setting. Specifically, they investigated the key variables that influenced RP, locate gaps in the evidence base and explore future implications by conducting a review of the existing literature in this area. The findings offer some insight into potential avenues for future RP research in the sports domain.

Given the increasing presence of RP research across the applied sports literature, and its appearance in professional training programs in the UK, it seems timely to pause and examine how RP texts have progressed to that of the present day. To achieve this, a collation and analysis typically associated with a review of literature evidenced previously in other areas of sport (e.g., Culver, Gilbert & Trudel, 2003; Culver, Gilbert, & Sparkes, 2012) has been adopted. The current chapter aims, therefore, to assimilate, analyse and present the last twelve years of RP literature within the sport domain. Research questions included the following: how many peer-reviewed papers were published between 2001-2012 focusing on RP or reflection within 'sport'? Who are the producers and consumers of the research? What methodologies and data collection methods were utilised? Where did the research take place and what are the peer-review outlets publishing in this area? To conclude, critical reflections about the past, present and future of RP research are offered. This exercise allows knowledge gained to be drawn together in one place and for strengths, trends and possible limitations of RP in sport research to be identified. Indeed, the determination and justification of a suitable review methodology itself to answer the proposed research questions raises an interesting debate.

Meta-analyses are common amongst sport researchers, particularly from those allied to a traditional scientific paradigm (e.g., Brown, Brown & Foskett, 2013) where statistical pooling and effect sizes are important. Others have used systematic reviews (e.g., Goodger, Gorely, Lavallee, & Harwood, 2007) in order to provide a longitudinal summary of a specific research area. The intention in the current chapter was to demonstrate a robust and reproducible data collection method and analysis process in order to reduce researcher subjectivity and bias, whilst being cognisant of our own individual epistemological and ontological beliefs. We therefore wanted to simultaneously remain true to those underlying values. That said, Goodger et al. (2007) acknowledged that qualitative research within their systematic review was treated differently to the majority of the other research, which was mostly quantitative in nature, and thus they chose to adopt a more descriptive approach. Such treatment of qualitative research was supported by Booth's (2001) argument that the criteria by which a systematic review is judged is mostly underpinned by quantitative methods, which he described as "institutionalised quantitativism". This infers that a 'gold standard' of methodology exists and a 'good' review must adopt such a paradigm, which when solely reviewing qualitative papers is not possible. Therefore, given that a meta-analysis was not appropriate due to high volume of qualitative content, whilst acknowledging that systematic reviews of qualitative papers take a different approach to that of the more traditional sense (Goodger et al., 2007), Mann et al.'s (2009) review method of similar literature was replicated and adapted.

As RP research in domains and disciplines outside of sport is largely qualitative in nature a meta-analysis, and to some extent a systematic review methodology, would not be appropriate approaches to answering all of research questions proposed in this chapter. As a result, a reproducible data collection procedure was adopted based on that of Mann et al.'s (2009) systematic review, whose literature search procedure was replicated within the sports literature (in order to reduce any subjectivity or bias in the research), which displayed an affinity with Booth's (2001) promotion of 'meta-synthesis' versus a 'meta-analysis'. In addition, a reference to previous RP research, as observed in Culver et al. (2012) was included in the selection criteria. Furthermore, specifically within the analysis of the sample, Culver et al.'s (2003) categorisation of qualitative papers was employed. In view of this, it is believed that a methodology has been constructed that is more sympathetic to the paradigm within which the research being reviewed was originally conducted.

## 4.3. Methods

### *4.3.1 Locating the research*

In order to locate literature that referred to RP, Sports Discus, PSYCHinfo, and Web of Science databases were accessed and the following search terms used: reflect; reflection; reflective practice *and* sport; within the title, abstract or keywords of each article only. Manual searches and reviews of identified bibliographies were also conducted using the same criteria. The search was limited to English language peer-reviewed research, published between 2001 and 2012 inclusively, which specifically focused on sport education or practice. The rationale to only include peer-reviewed journal articles is one supported by Culver et al. (2003), and which the authors feel is valid given that such papers are readily available in the public domain and for scrutiny by readers wishing to verify the claims made about their content in the current study. However, we acknowledge that there is other credible research not represented here focusing on RP in sport such as book chapters (e.g., Gilbert & Trudel, 2006; Knowles & Telfer, 2009; Telfer & Knowles, 2009) and professional practice or magazine articles (e.g., Cropley, Neil, Wilson, & Faull, 2011; Knowles & Saxton, 2010). Nevertheless, these outputs do not always undergo the same independent scrutiny as the academic peer review process, and it is beyond the scope of this chapter to review all forms of writing on the selected topic. The original search yielded 179 papers, literature reviews, conference proceedings, articles and commentaries.

Preliminary analysis of the peer-reviewed papers identified that many included the term “reflection” within the desired fields, however, subsequently did not discuss or demonstrate evidence of RP akin to the definition offered by Knowles et al. (2014) presented earlier or provide reference to reflective practice research. Examples removed at this stage include Aoyagi, Portenga, Poczwardowski, Cohen and Statler (2012) and Barker, McCarthy and Harwood (2011), where although the term “reflection” was mentioned in the titles, the papers themselves provided more of an overview of the field or a case study within applied sport psychology, rather than reflection *per se*. Further criteria for inclusion included: (a) papers had to consider or discuss at least one of the following: the *process* of reflection, and/or the *outcome* of reflection and (b) articles must have also provided reference to previous RP research though the context of this was not stipulated (cf. Culver et al., 2012).

### *4.3.2 Review procedure*

Akin to the process of content analysis as described by Sparkes and Smith (2014) all abstracts were read independently and then discussed as part of developing a coherent and negotiated coding protocol. As part of this process any discrepancies were resolved by case discussion until consensus between myself and two of the supervisory team (ZK and BC) was agreed (see Lincoln & Guba, 1985). Figure 4.1 shows a screenshot of the review process between the three parties, after which, a final sample of 68 items was derived.

| Study Design | Data Collection | Study Population/ | Discipline/ Profession | Location (first author) | Sample Size | Source | Reason for ? | BC | ZK | Final Call? |
|---|---|---|---|---|---|---|---|---|---|---|
| ? | ? | ? | sociology? | UK | na | Sociology of Sport Journal | no RP? | No | No | N |
| qualitative | semi-structured interviews | athletes | Sport Psychology | UK | n=10 | Journal Of Applied Sport Psychology | enough RP? Only 1 reference | No | No | N |
| case study | ? | elite adolescent female athlete | Sport Psychology | UK | n=1 | Reflective Practice | enough RP? No RP references inlcuded | No | No | N |
| ? | ? | athlete | ? | Canada | n=1 | Reflective Practice | reflection as a process? | Yes | Yes | Y |
| qualitative | interviews | sports coaches | Sport Psychology | UK | n=3 | The Sport Psychologist | enough RP? | Yes | Yes | Y |
| qualitative autoethnography | interviews; multiple reflections | ex-athlete | ? | UK | n = 1? | Reflective Practice | I think it should be inc but v.different to rest? | Yes | Yes | Y |
| qualitative | reflexive conversation | disability sports coach | Sport Coaching | UK | n = 1? | Reflective Practice | enough focus on RP? | No | Yes | Y |
| experimental | performance data; questionnaires | college students (PE) | Sport Psychology | USA | n = 50 | Research Quarterly for Exercise and Sport | I think it should be inc but v.different to rest? | Yes | Yes | Y |
| discussion? | ? | ? | Sport Coaching | UK | na? | Quest | enough focus on RP? | Yes | Yes | Y |

Figure 4.1. Screenshot of review spreadsheet to review data in line with inclusion criteria

### *4.3.3 Analysis*

The identified sources were summarised and categorised by country of origin, publication outlet, profession or community, research design and data collection techniques used. In order to categorise the papers, a combination of the classification procedures used by Mann et al. (2009) and Culver et al. (2003, 2012) were adopted. For example, studies were classified as qualitative if they employed one of the following data collection or generation techniques: (a) journaling or writing in log books; (b) open-ended questions, which were written responses to part of a survey or questionnaire; (c) interviews, structured, semi-structured or unstructured; (d) focus groups; and (e) observations, nonparticipant or participant. However, since not all papers in this instance included actual ‘data’, an extra category relating to discussion-

based papers was included into the qualitative classification (e.g., Anderson et al., 2004; Knowles & Gilbourne, 2010). Consequently, any research lying outside this definition was categorised as "quantitative" if "quantification in collection and analysis of data through the process of precise numerical measurement" (Smith, 2010, p. 8) was evident or "mixed" when employing a combination of methods. Figure 4.2 represents the review and analysis procedure described above (a full list of references of papers included in the review is available upon request).

## 4.4 Results

### *4.4.1 Origination and dissemination: The 'where'?*

Analysis of the sample (*n* = 68), specifically the geographical location of reflective practice literature in sport, revealed that 77.9% (*n* = 53) of scholarly contributions to the literature emanated from the UK. Other nations represented in the analysis were North America (*n* = 8), Europe (excluding the UK; *n* = 5) and Australia (*n* = 2).

The predominant dissemination outlets for reflective practice literature within sport were *The Sport Psychologist* (*n* = 18) and *Reflective Practice* (*n* = 17), which accounted for 51% of the published literature in this area. The contributions from other outlets can be seen in Table 3.1.

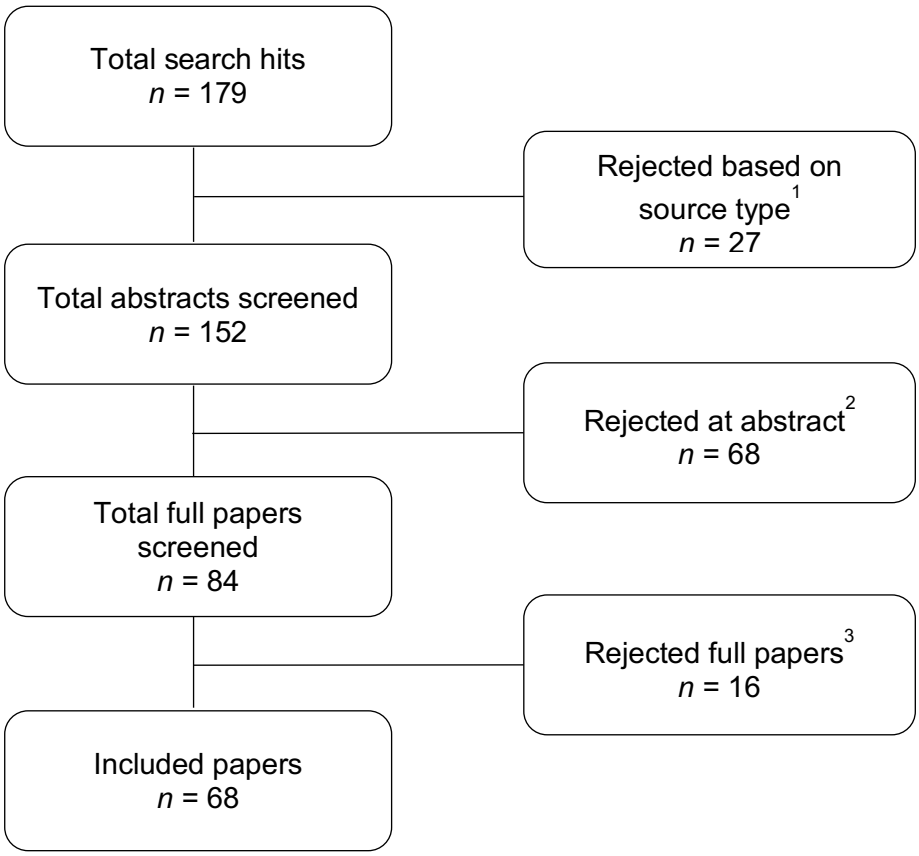


Figure 4.2. Flow diagram illustrating of article review stages*

### *4.4.2 Reflective practice and professions/communities: The 'by whom' and 'for whom'?*

Sport psychology (61.8%) and sports coaching (29.4%) were the most represented professions within the reviewed sample of articles; others included sport performance (where specific issues in sport were the central focus; *n* = 4) and those generally termed as sport scientists (*n* = 2). Within the whole sample, the dominant communities who were the focus or presenters of reflections were psychology practitioners (35.3%), coaches (20.6%) and athletes (19.1%). This category also included literature that was classified as 'NA' as they were discussion or literature-based papers and thus did not include participants. These accounted for 10 out of 68 of the overall sample (14.7%).

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* [1]Literature reviews, conference proceedings, articles and commentaries and equivalent were rejected here (e.g. only peer reviewed articles progressed further; Culver et al., 2003).
[2]Abstracts were rejected here if the process and/or outcome of reflective practice was not evident, as stipulated in Mann et al. (2009). If unclear, proceeded to next stage (full paper) for further examination.
[3]Full papers were rejected here if no reference to reflective practice literature was made, as outlined in Culver et al. (2012).

Table 4.1. Number of reflective practice publications per outlet

| Outlet | Sport<br>*n* (%) |
|---|---|
| The Sport Psychologist | 18 (26.5) |
| Reflective Practice | 17 (25.0) |
| Sport & Exercise Psychology Review | 11 (16.2) |
| Psychology of Sport & Exercise | 4 (5.9) |
| Journal of Sports Sciences | 2 (2.9) |
| Quest | 2 (2.9) |
| International Journal of Sports Science & Coaching | 2 (2.9) |
| Athletic Insight | 1 (1.5) |
| International Journal of Sport Psychology | 1 (1.5) |
| Journal of Sports Science and Medicine | 1 (1.5) |
| Research Quarterly for Exercise & Sport | 1 (1.5) |
| Adapted Physical Activity Quarterly | 1 (1.5) |
| Ergonomics | 1 (1.5) |
| International Coaching Psychology Review | 1 (1.5) |
| International Journal of Sport Science | 1 (1.5) |
| Journal of Hospitality, Leisure, Sport & Tourism | 1 (1.5) |
| Journal of Teaching in Physical Education | 1 (1.5) |
| Physical Educator | 1 (1.5) |
| Sports Coaching Review | 1 (1.5) |
| *Total* | **68** |

#### *4.4.3 Research design and data collection techniques: the 'how'?*

Reviewing the sample of literature in question, it is evident that qualitative methods were most prominent (88.2%) with only four articles each adopting quantitative or mixed methods. Of this majority, 18.3% were discussion-based papers. Of the other data collection methods, 38.3% included personal reflection, with 78.2% of those specifically focused on that of sport psychology practice. Additionally, 18.3% were discussion-based, and 15% adopted interviews as the data collection method.

A proportion of the literature reviewed were classified as discussion or literature-based papers (and thus not methodologically focused) and accounted for 16% of the sample.

## 4.5 Critical Reflections

The findings presented above suggest four focal points worthy of discussion: (a) reflective practice research is predominantly conducted within the UK (where); (b) reflective practice within sport psychology (who); (c) reflective practice and qualitative enquiry (how); and (d) understanding reflective practice (what).

### *4.5.1 Reflective practice within the UK*

The review concluded that the UK was (is) predominant in respect of peer-reviewed publications on the topic of RP in sport. Within the UK, RP appears to have been policy driven over the last decade or so, with several "waves" of literature resulting from and subsequently informing policy (see Figure 4.3). For example, within BASES, reflective practice was only 'recommended' within its supervised experience training program early in this analysed time period (pre-2009) but became a mandatory competency after this date corresponding with increased research outputs of this nature. A similar pattern of research informed policy is evidenced within allied health professions (e.g., counselling and psychotherapy, Brown, Duff, Karatzias, & Horsburgh, 2011; nursing, Evans & Strumpf, 2011). The UK dominance in this research area could be explained by such accompanying changes in policy, of which similar curricula do not appear to exist in equivalent professional training bodies overseas. For example, within the AASP certification criteria, based in the US, there is currently no formal requirement in place to engage in or evidence RP. However, researchers and practitioners from this region have discussed the benefits and advocate its use within and for applied practice (e.g., Holt & Strean, 2001; Poczwardowski, Sherman, & Henschen, 1998). A future question, therefore, could be 'when does RP development take place?'

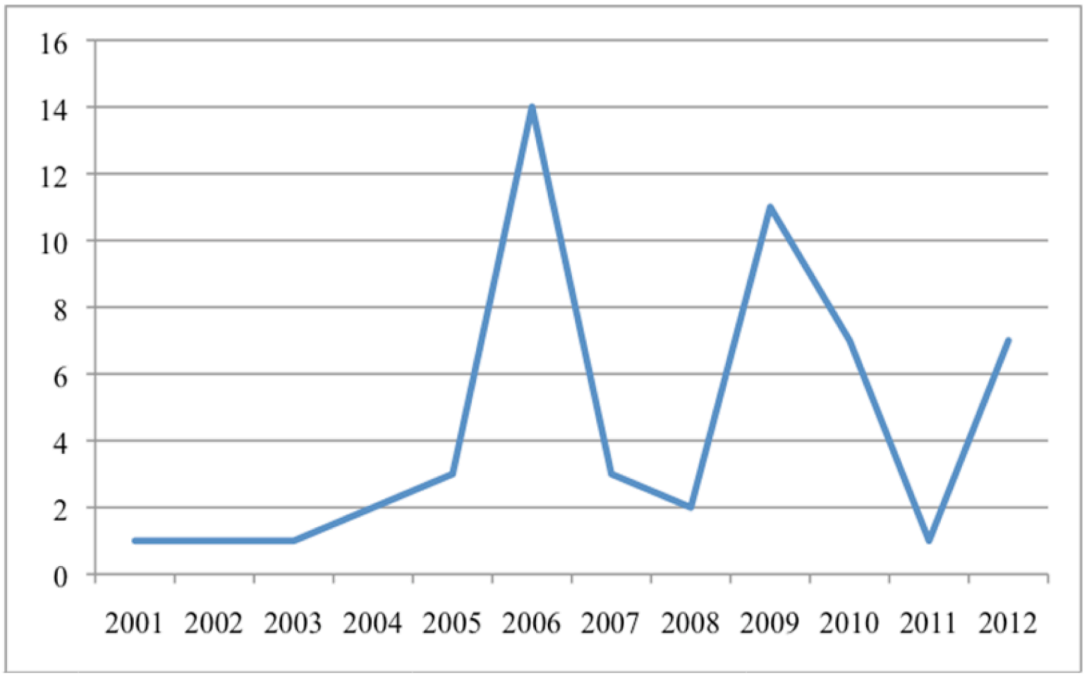


Figure 4.3. Temporal illustration of UK-based publications of reflective practice in sport

There is currently a cluster of UK-based researchers who are actively researching RP in sport, who have predominantly targeted an international audience indicated by the outputs they target for publication (e.g. *The Sport Psychologist*). Although not indicated by the results of this review, it is evident that others outside the UK are highly supportive of RP in sport and its benefit in becoming a more competent sport practitioner. Based on the last decade or so of dissemination in this field, is now an appropriate time to encourage the international community to embrace RP amongst its training and professional practice requirements and to share best practice? Furthermore, since there is limited, if any evidence *against* RP, wouldn't it be of benefit to those who currently do not engage in this process in terms of enhancing their practice?

### *4.5.2 Reflective practice within sport disciplines*

The review showed a dominance of peer-reviewed sport psychology and sports coaching literature over the last decade within the general domain of sport. By way of explanation the initial ($n$ = 3) publications on reflective practice in 2001 were focused on sports coaching ($n$ = 2) and sport psychology ($n$ = 1) and these professions have seen a literature base grow considerably over the last 12 years.

As mentioned previously, it is suggested that significant changes in policy that have made RP a compulsory element of training programs has contributed to the

growing evidence base over the last decade. This is likely to become more evident given the pending development of a new journal (Journal of Applied Case Studies in Sport and Exercise Sciences) to specifically publish practitioner case studies and share best practice within the wider sport community.

The majority of practice-based reflection literature was found to be derived from the experiences of trainee and neophyte sport psychology practitioners (e.g., Huntley & Kentzer, 2013; Rowley et al., 2012). Requirements for professional training schemes (e.g., BASES) with regards to evidence of RP may encourage these practitioners to write and subsequently share those reflections more publicly. Accomplished practitioners alike are required to document reflections for the purpose of re-accreditation or continued professional development and sharing these experiences from this more established platform is fruitful for trainee or less experienced practitioners and to gain peer-review on their applied practice. To date, however, only one article exists that documents in-event experiences and reflections within sport psychology (e.g., Knowles et al., 2012), which builds on the sentiments of Andersen (2000), who called for more real-life examples of sport practitioners in action to be presented within the literature. Therefore, if practitioners were formally encouraged to share reflections and experiences more frequently, could this not further develop the field and create a more supportive culture where we can share best practice?

### *4.5.3 Reflective practice and qualitative enquiry*

RP literature in sport over the last decade is dominated by qualitative methodologies. Much of this research has been self-reflective in nature (i.e., reflections on one's own practice or experience). Holt and Strean (2001), authors of the first published paper to formally consider RP in sport psychology, suggested, "Self-reflective writing techniques allow practitioners to explore their practice and reflect on their experiences" (p. 193). Several examples of such writing in a sports context were observed within special editions of the journal *Reflective Practice* in 2009, 2012 and 2013. However, some articles in this topic area (beyond those in *Reflective Practice*) provide limited information about the actual reflective processes utilised (Knowles et al., 2012). Providing evidence of the reflective process, whilst sharing experiences can be achieved in different ways. For example, Cropley et al. (2007) provided direct extracts of the primary author's reflective writings, whereas in Knowles et al. (2012) other authors were used as 'critical friends' to a practitioner to stimulate further reflection post-event of a staged and layered nature. However, it appears that whilst practitioner-focused reflective accounts have steadily increased;

researchers are now more readily using 'other' formats of representation, such as confessional tales and autoethnography through which to stimulate the process of reflection or frame their writings (see Sparkes & Smith, 2014). Autoethnography, can be used as a means of instigating and supporting the process of RP, and in some cases provide evidence of critical reflection in action (McIlveen, 2008). However, according to Knowles et al. (2012) many autoethnographies currently available in the literature do not demonstrate a level of critical reflection that is useful to shape future writings and genres within the field. For example, in response to a recent article by Rowley et al. (2012) documenting personal experiences of a neophyte practitioner working within rugby league, Tod (2012) observed that the author "felt compelled to spend a significant chunk of the paper justifying the value of reflective practice and autoethnographic writing. The consequence is that there is likely to be more to his experience than we have been able to read" (p. 52). This suggests that the sport community as a whole risks being restrained from generating insights into practice and application as authors often feel the need to adopt a defensive approach should they engage in different forms of representation. Accordingly, they spend much of their articles *telling* the reader about their approach rather than *showing* them the process of reflection in action. This is counterintuitive, as to accept these methodologies could lead to a deeper understanding of reflective processes by way of dissemination, which could therefore develop a more efficacious approach to development.

Although self-reflective writing and sharing is of value, and the volume of RP research in sport has increased, there seems, still, to be a lack of evidence-based research. More research exploring the effectiveness of RP within sport and/or practitioner settings (e.g., Knowles et al., 2012), and evaluations of RP interventions (e.g., Picknell et al., 2014) appear useful at this time to provide a more empirically robust case for its use, benefit and impact. Additionally, an appreciation of the strengths and limitations of evidence emanating from different paradigms would be valuable, as it appears a defensive stance is sometimes held with regards to autoethnography, which is likely to be that it is so often judged using inappropriate criteria, meaning that authors have to invest a lot of words in a paper justifying the approach rather than actually doing it.

#### *4.5.4 Understanding reflective practice*

Although many articles present the term 'reflection' in the title or keywords they were removed from the data set for reasons of not fulfilling the inclusion criteria of discussing the process or outcome of reflection, and/or not using literature on this

topic to support their present work (i.e., provided in their reference list). One explanation here is that whilst 'reflection' and 'reflective practice' are terms that are widely used in sport, in practice they are less widely understood (Cropley et al., 2010a). This is supported by Cropley et al. (2012) who investigated issues currently associated with RP within coach education. They found that participants reported a lack of confidence in their understanding of RP, which contributed to limited engagement with the process. It could be suggested therefore that within sport, we have 'jumped on the bandwagon' of reflection without fully understanding what it is and how it is done. As a result, practitioners and researchers alike have negative experiences of engagement in the reflective process and often cease to adopt reflective approaches to learning. Consequently, if there is a lack of understanding about RP in sport and how to engage in it, could it be that the academic literature is moving too quickly and is in danger of leaving practitioners behind in its wake (Trelfa & Telfer, 2014)? If this is the case, it may be appropriate to take stock as a field to ensure better understanding of the concept or entice practitioners and educators to 'move with the field' by translating this into education, training and facilitation of strategies. RP specifically within sport psychology to date has been driven somewhat by policy, whereby practitioners are 'forced' to engage in RP (whether they want to or not) in order to achieve professional qualifications. However, according to Hobbs (2007), expecting people to be open and honest and disclose personal information involuntarily can provoke strategic responses or even hostility. Although RP has been deemed compulsory in some settings, where professional competence is a requirement, there is limited scope to conform to the personal preferences of learning by every individual. If future RP research within sport tackles this issue of engagement and the barriers to limited empirical evidence provided so far, then it could be argued that future RP research within sport would go some way to address this lack of understanding and willingness to engage in it as a process.

The academic journals that have published RP research have an important role to play in ensuring such outputs, through the review process, are theoretically robust in their conceptual understanding of RP and are located within the wider literature base of the topic area. Indeed, by publishing reflections that are not (by way of definition) RP-based (e.g. reflections that are accounts, report-based, or descriptions of 'what happened') there will continue to be a lack of understanding in this area. Understanding the terms reflection and RP nevertheless, does not mean that practitioners apply or report it representatively within the contexts in which they find themselves. Finally, it should be acknowledged that by removing articles deeming to describe or utilise RP (by employing these terms within the title and/or keywords),

the question to be asked is that if the authors are not 'reflecting', what are they actually doing if it is not reflection? Encouraging authors to justify their ontological and epistemological positions within their writing could ensure that RP theory is acknowledged and therefore as a consequence, any subsequent writing/research would be aligned with reflection and/or RP markers.

As a result of the limited attention provided to the theoretical or philosophical standpoints and methodologies, it should be acknowledged that the categorisation of the articles within this study was not an easy process, and a number of negotiated judgment calls had to be made. For example, Richards, Collins, and Mascarenhas' (2012) RP study within netball adopted a unique research design, which was very different to any other paper within the sample. The paper fulfilled the selection criteria outlined in the methods section in order to warrant its inclusion, but its design was categorised as 'mixed' as it used both statistical analysis and personal reflection. However, this paper could have also been categorised as 'qualitative', as the statistical analyses were presented as part of the overarching personal reflections. Given the dynamic nature of making such judgment calls it could be argued that some articles were misallocated, and others may disagree with the categorisations made. These challenges, however, provide more evidence for the need to define RP and acknowledge underpinning methodology and theory when conducting research on RP in sport in order to provide more credibility and evidence of the effectiveness of the concept.

Moreover, self-reflective research could be viewed by some as 'easy research', for reasons including the ability to utilise small participant samples in such studies (in many cases just the authors themselves); complex ethical applications are not needed; and minimal costs are involved. However, the outcome and the quality of reflection and RP are more complex issues, some of which we are only now discovering, and as a result, such research should not be viewed as 'easy'.

### *4.5.5 Reflecting back*

The current study reveals that several 'waves' have emerged over the last decade surrounding RP in sport, (e.g., 2004+, 2009+). The sport community is beginning to see evidence-based research through academic papers in RP in sport, with more disciplines embracing RP (driven by policy, maybe) in a professional context (Knowles et al., 2014). Therefore, this would suggest that there is perhaps no longer a need to argue in favour or convince sport professions as to the benefit of RP (Tod, 2012), but a need to now proceed with the evidence-based research which is required for the field to develop further (e.g., Cropley et al., 2012; Knowles et al.,

2012). Furthermore, books and associated chapters (e.g., Knowles et al., 2014) are helping the accessibility and area of RP commentary and applications, as they are easily accessed within education and the wider sport community as teaching aids and learning resources.

### *4.5.6 Reflecting forwards*

By way of conclusion to this study, it seems appropriate to propose some avenues to consider regarding RP in sport in relation to motivation, efficiency, and effectiveness. Currently most reflective practitioners are (or at least initially) extrinsically motivated regarding reflective practice and most engagement appears to be policy driven. Therefore, how can intrinsically motivated reflectors or reflective practitioners be developed? It is argued that in the short-term at least, engagement in RP will still be stimulated from extrinsic sources, with the view that some will continue and experience the intrinsic benefits of reflective practice and thus it become habitual to their practice. However, as the evidence-base for RP in sport increases (e.g., internationally and across domains) we may begin to see more individuals embracing RP as an approach for personal and professional development regardless of the external drivers of policies and regulation. Finally, it is contested that the 'how to' of RP has not been sufficiently addressed in within sport. Therefore, more appropriate education on and pedagogical approaches to RP is required for practitioners, educators and supervisors of the future, especially those allied to professional training schemes where the demonstration of RP as a competency is required.

## 4.6 Summary

This chapter summarises the findings from reviewing the RP research within sport published over the last twelve years (2001-2012). Specifically, the UK was the dominant nation producing RP literature in sport, the majority of literature emanated from or was focused on sport psychology or sports coaching, and qualitative methods were predominantly utilised. Although more than a decade has elapsed since the initial RP research in sport, the literature is still developing, with many areas warranting further attention. Throughout the chapter, recommendations are made about those areas requiring greater focus, which include (but are not limited to) calls for: more evidence-based studies (e.g., interventions) to demonstrate the effectiveness and utility of RP within sport; greater methodological attention; and transparency within future research outputs. Further recommendations are presented within Knowles et al.'s (2014) work, which include but are not limited to, a need for

RP to remain a central facet of educational and professional processes within sport, to encourage a wider use of technology to facilitate the process of reflection, and a balance between scientific/empirical evidence and evidence of personal accounts. Finally, researchers beyond the UK are encouraged to embrace and explore RP in the domain of sport.

# Chapter Five

# Study 2: Surveying the current landscape of reflective practice (2013-2015): Utility, learning and next steps

### 5.1 Thesis Study Map

| **Study** | **Objectives & Key Findings** |
|---|---|
| Study One: Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport (completed 2013; published 2014) | Objectives:<br>• To assimilate, analyse and present the reflective practice literature within the sport domain<br><br>Key Findings:<br>• Benefits of RP appear to be widely accepted<br>• A lack of understanding exists within the literature<br>• More evidence-based research is needed including (but not limited to) exploration of:<br>1. the motivation, efficiency and effectiveness surrounding RP;<br>2. the pedagogical approaches associated with 'how' one should or could use RP. |
| **Study Two:**<br>**Surveying the current landscape of reflective practice (2013-2015): Utility, learning and next steps**<br><br>Phase 1: *Understanding the international landscape of RP in sport psychology education and development* (completed 2014)<br><br>Phase 2: *Supervising and reviewing the RP competency of BASES Supervised Experience (SE)* (completed 2015)<br><br>Phase 3: *Delegate perceptions of a RP workshop: a summary of evaluation data* (completed 2016) | **Objectives:**<br>• To explore and summarise the international landscape of reflective practice in sport psychology<br>• To explore SES practitioners' views and experiences regarding the utility of reflective practice, including:<br>○ Perceived value & understanding of RP (supervisors, reviewers and supervisees)<br>○ Perceived confidence & competence of reviewers and supervisors judging RP<br>○ Training obtained prior to role/s and training required<br>• To summarise supervisee / delegate feedback and future recommendations based on 3 years delivery of RP workshop |

### 5.2 Introduction

Findings in study one (Chapter 3) suggested a lack of understanding in the literature about RP and made calls for more evidence-based research in this area. In addition, it was highlighted that a lack of guidance on 'how to' engage or facilitate RP in sport practitioners exists, particular in education practice and supervision. Furthermore, there is limited evidence of best practice regarding RP intervention

design / skill development, and as such, formative research in this area could provide a framework for how to improve the competencies and skills required for effective and critical engagement in reflective practice.

Typically, formative work is used to inform the design and implementation of interventions which, as a process, involves consultation with key stakeholders and/or beneficiaries and a diverse ranges of participatory research methods, often adopting both quantitative and qualitative approaches. Key facets of formative evaluation include: (a) gaining understanding of the target population; and (b) using formative evaluation in order to plan future programmes or interventions (Fletcher & Maher, 2014; Gilbourne & Richardson, 2005; Schinke, Tenenbaum, Lidor & Battochio, 2010). Embracing such a methodology, underpinned by pragmatism, the current chapter adopts a range of research methods to further understand RP in the context of sport and adopts a three-phase approach, reporting the methods and results section for each phase separately. The aim of *phase one* was to explore RP in sport psychology education from an international perspective. During this phase, a number of experts within the field of sport and exercise psychology practitioner education were recruited to explore findings from chapter 3/study 1, as well as ascertain an overarching view of how RP is typically developed in trainee sport psychologists in each of the participants' respective nations. *Phase two* aimed to explore the RP experiences of BASES Supervised Experience (SE) supervisors and reviewers. Finally, *phase three* aimed to analyse completed post-workshop evaluation forms from delegates attending the BASES RP workshop. Given the growth of RP research within sport (cf. chapter 3), and the part-time nature of the thesis, Table 4.1 provides a temporal overview of the timeframe for the tasks relating to the present chapter, including data collection, analysis and writing up. Each of these formative phases further contributes to the wider thesis aim of critically exploring knowledge, understanding and engagement in RP within a sports domain, as well as providing a local and international perspective of RP within educational and professional development sport settings.

Table 5.1: Data collection and writing timeframes for all phases of chapter 4

| Study | Dates | Aim/rationale |
|---|---|---|
| Phase 1: Interviews | Data collected: Aug 2013 - Mar 2014 Written: 2014 | To explore findings from chapter 3, focusing on international sport psychologists with significant experience of developing practitioners and using RP |
| Phase 2: Survey | Data collected: Sep 2014 - Dec 2014 Written: 2015 | To explore backgrounds, experiences and perceptions of the BASES supervisor and reviewer network, with a specific focus on RP |
| Phase 3: Evaluations | Data collected: May 2013 – Jun 2015 Maternity Leave: Sep 2015 – Sep 2016 Written: 2016 | To explore the evaluations of the BASES RP workshops between 2013 and 2015 in order to inform future workshop development |

## 5.3 Phase One: Understanding the international landscape of RP in sport psychology education and development

### *5.3.1 Phase One Methods*

*5.3.1.1 Participants*

Inclusion criteria required participants to: (a) hold a relevant qualification to practice applied sport psychology in their respective country (e.g. BASES accredited, HCPC registered, AASP registered); (b) have responsibility for the education, development and/or supervision of trainee sport psychologists; and (c) to be directly involved or have experience of curriculum design / practitioner education materials/courses. In addition, a further *desirable* criterion was: (d) to hold an influential position within an accrediting body (e.g. president of a sport psychology organisations, member of working group with educational policy/curriculum foci).

Participants were selected via purposeful and snowballing techniques in order to select "information rich participants whose study [would] illuminate the questions under study" (Patton, 2002, p. 273). In addition, participants were sampled from a range of countries to ensure that the sample represented practitioners and educators working in those geographical areas that had produced research into RP (cf. Huntley et al., 2014 / Chapter 3). These were the USA, Canada, Australia, the UK, and rest of Europe. In using these criteria, it was hoped that the participants would be able to provide an in-depth, international perspective on RP and allow comparisons between nations and professional accrediting bodies (e.g., BASES, AASP, FEPSAC) to be

made. Specific affiliations are not provided here to ensure anonymity is maintained. Participants were contacted via publicly available e-mail addresses (e.g., from institutional or organisational websites) to participate in the study. The initial e-mail explained the purpose of the study, requesting participation in a one-to-one semi-structured interview via telephone or Skype lasting approximately 30 minutes. Finally, all participants were asked to decipher between 'national practice' and their own opinion about such processes. However, it is accepted that this separation is not always fully achievable and evokes limitation.

A total of eight participants from five countries (UK [*n* = 2], USA [*n* = 2], Canada [*n* = 2], Belgium [*n* = 1], and Australia [*n* = 1]) provided written and or verbal consent to take part in the study (Male: *n* = 5). A participant information sheet containing a consent form was attached to the initial approach email, with participants requested to complete (digitally) and return to the researcher to confirm participation. The demographic of participants included practitioners only (*n* = 1); academic and practitioner (dual role: *n* = 7). Affiliations of the participants included: BASES (*n* = 3); BPS (*n* = 2); AASP (*n* = 3); Other (*n* = 3). At the time of data collection four participants occupied leadership positions for professional accrediting bodies within their country.

*5.3.1.2 Interview Guide*

A semi-structured interview utilises a standard set of questions whilst simultaneously adopting a flexible approach (e.g. order of questions could be altered or probes added for further information; Gratton & Jones, 2010). Such an interview is conversational in nature, where an interview guide is used to make sure that pertinent topics are covered whilst allowing for adaptation as warranted by the responses or circumstances of the interviewee (Roller & Lavrakas, 2015). Open-ended questions were developed to allow the exploration of participants' perspectives of RP in the training and development of sport psychologists. Key findings from the previous chapter (Ch. 4; Huntley et al., 2014) were used to inform the semi-structured interview guide. This included questions about participants': (a) understanding of RP (e.g., we felt that there may be a lack of understanding about the term RP; what do you feel is happening here?); (b) views of the dominant methodology adopted in RP research (e.g., RP research over the last decade is dominated by a qualitative methodology, with a lack of 'evidence-based' research, with most of it being 'self-reflective' in nature. Why do you think this is the case?); and (c) recommendations on neophyte training and development policy (e.g., if you could, how would you change (if at all) current educational policy regarding RP and sport psychology?). The full interview schedule is available in appendix 2.

*5.3.1.3 Procedure*

One-to-one interviews were conducted between August 2013 and March 2014. Participants were provided with a copy of the interview questions prior to the interview itself. This was to 1) encourage participation in the study; 2) ensure full informed consent upon agreeing to participate; and 3) ensure in-depth responses and rich data rather than superficial answers. In addition, whilst not guaranteed, participants were asked to not discuss the interview with anyone else to ensure views obtained were their own thus limiting bias. A single interviewer conducted each interview using Skype or telephone, with interviews lasting on average 37.68 min (range 00:21:20 – 00:57:08; SD = 13.17). Digital audio recordings were made of each interview (Digital Voice Recorder, Olympus VN-8600PC), and recordings were then transcribed verbatim. Prior to analysis, transcripts were sent to participants for accuracy checking. Upon receipt, interview transcripts (168 pages, Arial size 12, double spaced) were imported into NVivo 10.0 (QSR International) for data handling and analysis.

*5.3.1.4 Data Coding and Analysis*

All collected data was subjected to thematic analysis (Braun & Clarke, 2006) using a 6-step analytical process of familiarisation, generating of initial codes, searching for and identifying themes, reviewing themes, defining and naming themes, and writing the report. Given the flexibility within this approach, both an inductive and deductive position was permitted (Clarke & Braun, 2013). Deductive coding was based on the findings reported at the end of chapter four (see p.74) which were to be explored further. Inductive coding also took place to explore participant experiences and perceptions of RP that were beyond the initial deductive approach. The following outlines in more detail on the 6-step coding approach with illustrative examples where beneficial.

*(1) immersion*; In familiarising myself with the data, hard copies of all interview transcripts were read and re-read to ensure familiarity and to apply a process of understanding. Margin notes were made on points of interest and overarching responses (see figure 5.1 for an example of a screenshot of an interviewee response (left) and my initial notes on the right). Transcripts were uploaded to NVivo 10.0 for data storage, management and subsequent analysis;

(2) *generating initial codes*; After data immersion, initial codes were developed across the dataset with associated data added to each code (see figure 5.1);

| | |
|---|---|
| R: Reflection is used in a lot of situations that have nothing to do with reflective practice, or even applied practice at all. People might be doing really laboratory-based research and talk about their reflections on whatever theory they're doing or something and it's really just they're using it as a synonym for our thoughts about or what we think, it's not actually reflective practice. But I don't think they intended it to be what we think of as reflective practice, either. I think it's a word has multiple uses and it's used outside of the reflective practice context a lot. | Reflection is used frequently in different settings.<br><br>Synonym.<br><br>Has multiple uses. |

Figure 5.1. Screenshot of 'making sense' process and generation of initial codes

(3) *searching for and identifying themes*; Individual codes were then sorted into possible themes. These included those predetermined by the findings in chapter four and new ideas permeating from the data (see figure 5.2);

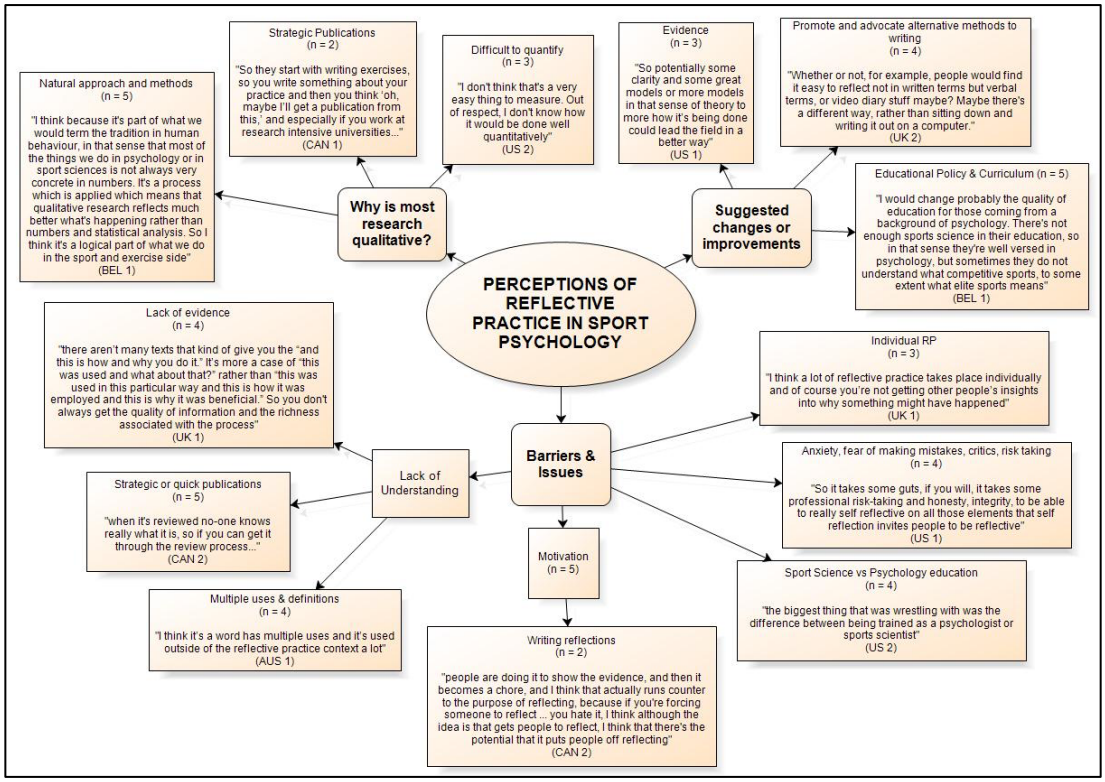


Figure 5.2. Screenshot of initial themes within stage 3

(4) *reviewing themes*; Themes and codes were checked, discarding non-fitting data or realigning into another theme where applicable. Figure 5.3 shows an example of an original section of coding that was discarded at this stage.

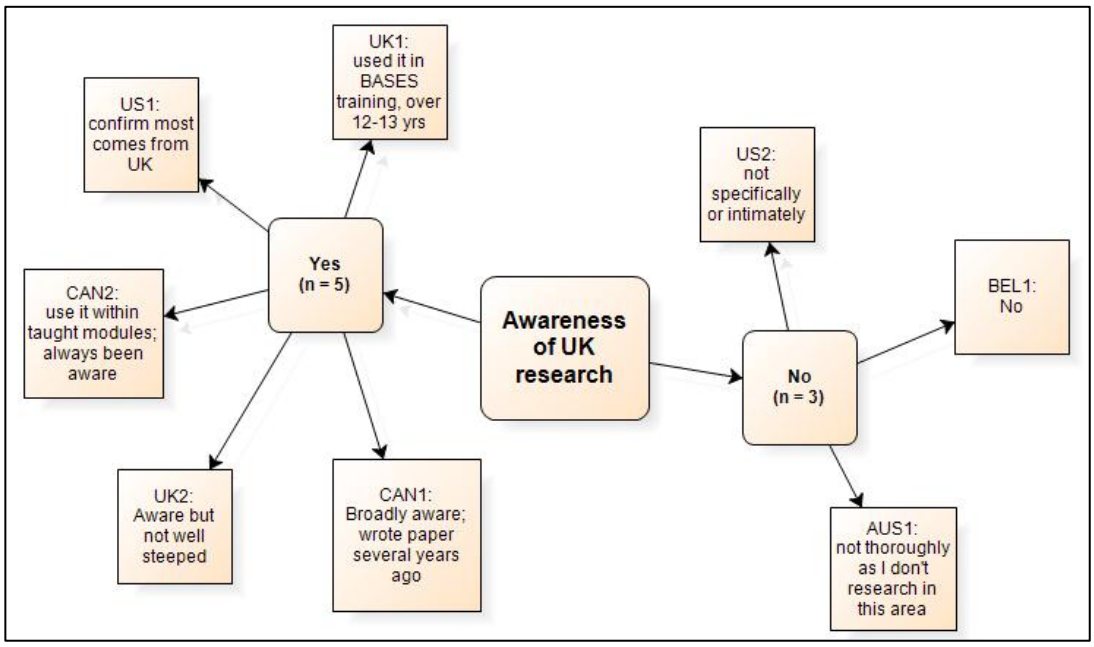


Figure 5.3. Screenshot of theme that was removed during stage 4

(5) *defining and naming themes*; This stage involved my supervisory team as critical friends who reviewed proposed themes and helped to define and helped to ensure they were appropriately named. To illustrate, figure 5.4 shows an example of a theme that was originally “barriers and issues” but this became “characteristics for RP” in the final iteration;

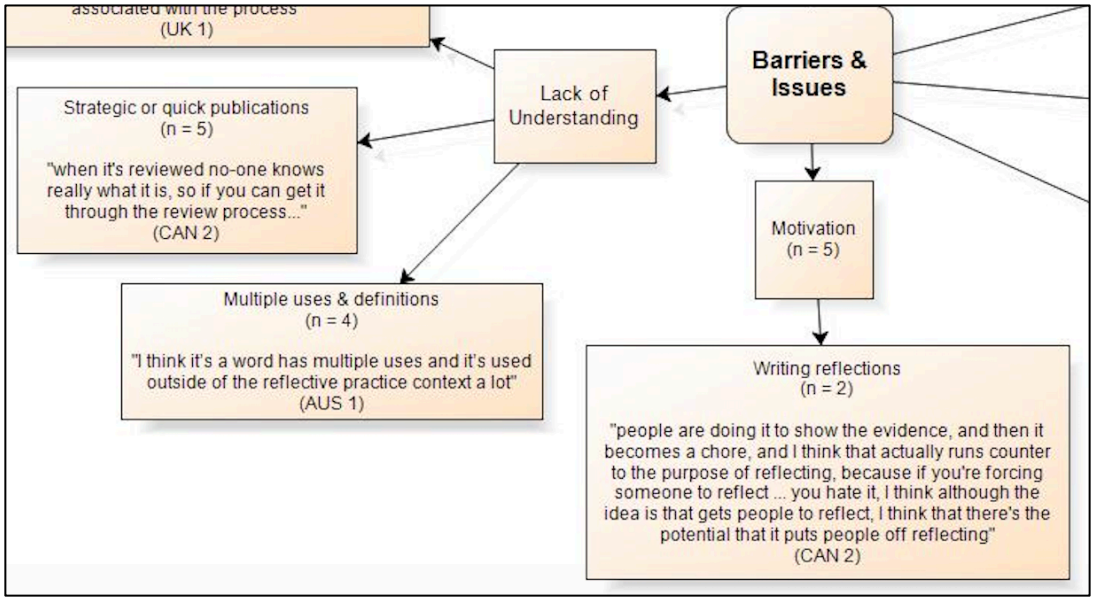


Figure 5.4. Screenshot to illustrate the outcome of stage 5

(6) *writing the report*; In writing the report, themes were represented by illustrative example verbatim quotes (using pseudonyms) to enable the reader to empathise with and immerse themselves in the participants' experiences (cf. Sparkes, 1998). To ensure for trustworthiness, member checking was used to enhance the researcher's understanding of participants' responses whilst critical friends were employed throughout the analysis process to promote further reflexivity and sense-making (Sparkes & Smith, 2014).

### *5.3.2 Phase One Results*

The following section summarises the key themes identified from the semi-structured interviews and subsequent analysis. These include current practitioner education, RP and experiential learning, characteristics required for RP, outcomes of RP, and RP research.

#### *5.3.2.1 Current Sport Psychology Practitioner Education*

Current education for sport psychology practitioners highlighted that of the five countries represented in this study, Higher Education Institutions (HEIs) were responsible for sport psychologist education and development within three of these nations (Australia, Belgium and USA). Only one country had specific training routes for sport psychology practitioners outside of a formal education system (the UK), and one country did not offer any formal training (Canada). However, all represented countries ($n$ = 5) confirmed that the title "psychologist" was protected by legislation. Only two out of the five countries (Australia and UK) reported that evidence of RP was required within their professional training routes and was linked to the respective awards, which are highlighted here. For example, within Australia:

> They [students] have to do a minimum of 1,000 hours of supervised practice… Each 250-hour pack, they have to submit all their paperwork in terms of client contact hours, case notes, etc but they also have to write a reflection of that 250 hours. In addition to having to reflect (on) every case presentation they do, there are also other assignments… they (also) do an intake interview and only 25% of their mark is on how well they do the intake interview; the other 75% is their reflections about what they did or didn't do in the intake interview (Sarah)

In the UK, those engaged with the BPS qualification are required:

> To provide a number of reflections on experiences. But that might be reflections on things such as meetings or ethical situations they've found themselves in and probably looking at evaluating impacts of their consultancy and how they've conducted they've conducted their consultancy (Michael)

Another UK-based participant added that such reflective evidence must be based on:

> Activities within the four key roles. Most of the reflective activities will take place in the ethics and CPD key role one and key role two, which is the consulting role, probably key role four, which is the communication and dissemination role. The candidates are tasked with providing reflections of their experiences or the degree to which they experience ethical dilemma. Again, what happened? What did they do? What did they learn from it? And so obviously as a strong requirement then to build up a series of reflections in their activities in those particular key roles (Andy)

The alternative route to practicing within a sport psychology context in the UK is via BASES SE, where one participant briefly describes the evidence of RP required.

> (Within) the current BASES system… there's (a) workshop on it [RP] people go through, and obviously there is some degree of self-reflection again, which is required in a portfolio of evidence. And so reflective practice is part of that person's portfolio, that evidence that they put in (Andy).

*5.3.2.2 RP and Experiential Learning*

Regardless of the respective curricula in place, and whether evidence of RP was required for a professional qualification or not, most participants confirmed the notion that reflection supports learning from an experiential perspective. In a US taught master's programme, "First year students observe second year students (in) delivering services. They bring all those experiences to group supervision and we discuss it, we derive lessons, we use the reflection model [Orlick's] to move forward with learning" (Archie). This (US) participant went on to describe more precisely:

> We start it [RP] as a learning tool… And then we do some education about it. So, a learning tool, how it can increase output [or] performance next time, even without adding new tools, new knowledge and skills, because we learn based on how we just performed (Archie)

In the UK, participants described how learning from experience takes place within the BASES and BPS curricula. For example, within BASES SE, "The candidates are tasked with providing reflections of their experiences or the degree to which they experience ethical dilemmas. Again, what happened? What did they do? What did they learn from it?" (Andy). However, another UK participant shared some of the challenges in understanding contextual differences between classroom and more applied settings where required practice hours are accrued, suggesting that learning still takes place in the classroom, but at the time students may not fully grasp what is required or what may happen until they are in the real-life applied setting. Specifically:

> We discuss them [learning situations, e.g. room set up, language, tone] with students here all day long, but when you're an MSc student and you're in a classroom environment, the real world is a little bit further away, isn't it? They don't always contemplate and get the context of what you're talking about. But people actually who are embarking upon the real stuff in stage two practice, they're actually living it and to have something like "oh, I remember so and so talked about that" (Michael)

Within a Belgian sport psychology course, a portfolio is utilised for the students to demonstrate their experiential learning. However, in criticism of such a method, the respective participant suggests that students:

> Lack the methodology to do this (portfolio) in an efficient way. (For) most of them, their portfolio would be a description of facts, but not (bringing) those facts together into thinking about the process. They are not able to do this because they didn't learn how to do this. And that's what's missing with the portfolio system (Billy)

A participant situated within the Australian sport psychology education system provided a different example of how reflection upon experience is embedded within assessments, and arguably presents a more guided approach to facilitate learning, compared to the aforementioned portfolio, where students:

> Have to write an essay about their perceptions of the pros and cons of using [a specific form of learning] in sports psychology and in exercise psychology, using their own experiences as examples. So all the way through it [course] there's assignments related to reflection (Sarah)

Here, the specific direction to write about 'pros and cons' could alleviate the natural tendency to simply describe what happened as suggested in the portfolio example, and therefore facilitate deeper learning. In addition, students on the Australian course are also expected to reflect upon case presentations when working with clients, which includes reflections on their own experiences:

> Part of their [students] case presentation is a reflection about the case, about their experiences of the case, not their reflections about the client but reflections about their experiences of working with the client. It's part of presenting a case presentation (Sarah)

Again, here the specific direction or guidance provided on what to reflect on specifically reduces the likelihood of description or more superficial reflection, transitioning from more technical to practical (or critical reflection). A further example of improving depth of reflection was highlighted by Andy, who also had observed a lack of reflective depth within a UK system suggesting that here, feedback from others is also key for learning from RP:

> You see some candidates using a process, as in "what happened? What did you learn? What could you do differently?" in the reflection, and others who just write. And some are less in-depth reflective than others in terms of what they do about it. They [candidates] describe what happened rather than as really drawing from it. And so that just varies from candidate to candidate, and again it's up to the assessors [or supervisors/reviewers] to then give feedback as to whether that reflective diary is being reflective enough (Andy)

From a more long-term perspective of learning and development, a final point was made by Michael, who also described how learning via RP must continue *beyond* the

timeframe of initially working towards a qualification such as those outlined above, specifically stating:

> I'm a huge advocate for continued professional development and just because someone's accredited or chartered [or qualified] that doesn't mean that they know everything. It just means that they've reached a minimum standard to practise safely. But I think there are too many occasions where once they've reached that standard it's almost "well okay, I don't need anybody else now." I don't think that can be further from the truth (Michael)

This is echoed within the Australian system where RP is also a key part of continued lifelong learning:

> For all psychologists in the country (AUS), to maintain registration, you have to do continuing professional development but at least 20 hours of that have to be peer supervision, which isn't directly reflective practice but obviously usually part of it (Sarah)

*5.3.2.3 Characteristics required for RP*

Throughout the interview analysis it became evident that certain characteristics are required for effective RP. Two key themes specifically related to understanding RP and the motivation / desire to engage in RP which are further explored here.

*Understanding RP.* In order to use RP effectively, it could be argued that a level of understanding must exist, where such understanding is supported through published literature or by external facilitation (e.g. supervisors, educators), or a combination of the two. Within chapter 2 and 3, debates about the confusion surrounding RP in the reviewed literature were highlighted. Therefore, participants were asked to comment on the evident confusion associated with RP. Many referred to the interchangeable use of terminology as being problematic, with reflection, RP and reflexivity used loosely and as synonyms. One participant communicated:

> 'Reflection' is used in a lot of situations that have nothing to do with reflective practice, or even applied practice at all. People might be doing really laboratory-based research and talk about their reflections on whatever theory they're doing or something… they're using it as a synonym for our thoughts about or what we think, it's not actually reflective practice. But I don't think they intended it to be what we think of as reflective practice, either. I think it's a word has multiple uses and it's used outside of the reflective practice context a lot (Sarah)

Another participant indicated, "People tend to use the same term to define different things and different terms to define the same things" (Dave). Further, one participant highlighted that confusion regarding the nature of RP was more widespread, with delegates at a specific RP conference debating its definition with little consensus:

> I think there's a lack of understanding of what reflective practice is. However, I think there's a lack of understanding partially because there's a lack of education around it. Also, because no-one can agree on what reflective

> practice is. I was at the Reflective Practice conference in [month]. There was one at [location], and some amazing discussions with some very experienced reflective practitioners, and everyone was disagreeing about what does reflection in action really count as reflection. And so, I think the field, if you want to call it the reflective practice field, has caused its own downfall, because of the lack of agreement, but then at the same time I tend to think how can you agree on something that probably is a very personal endeavour anyway? (Megan)

A similar perception was evident when considering the understanding of RP in the literature. One participant suggested a possible lack of understanding from editors and reviewers accepting and publishing manuscripts with an RP focus:

> It's not well understood what we mean with reflective practice, or with reflection. Reflection to be, "I'm a nice guy, I'm a [job title], I work in [country], and I'm fluent in [language]", and that's it. But it doesn't add something to the reader's knowledge or understanding of my competences. So I think there's a lack of understanding of what reflection we could add, in the article or the chapter, as those people reading it (Billy)

Another participant referred very specifically to a lack of literature explaining the 'how to' of RP, suggesting a gap exists which may be causing issues for practitioners:

> There aren't many texts that give you the "and this is how and why you do it [RP]" It's more a case of "this was used and what about that?" rather than "this was used in this particular way and this is how it was employed and this is why it was beneficial." So you don't always get the quality of information and the richness associated with the process (Michael)

However, another participant suggested, referring to the UK-based literature on RP, that masters students found it complicated and difficult to understand, thus referring back to more simplistic processes and frameworks to guide RP:

> When we hit the UK articles with the critical self-reflection and technical self-reflection and then emotional and social, that really becomes very complex and complicated in the students' minds… So then we then go back to the models that are more circle in nature and then we examine our emotions and we examine the outcomes and the consequences, alternative courses of action, all those types of things that also some models of reflection produce (Archie)

The use of a framework was also cited by several other participants, including Johns (1994), Gibbs (1988), and Schön (1983;1987). One UK-based participant stated:

> I work very much within the frameworks of Gibbs, Ghaye and also Johns, and I suppose they were probably the three main areas where you're looking at immediate reflections on what's just happened versus how my practice has developed over the last period of time (Michael)

However (Michael) also shared their perception of using such frameworks emanating from domains outside of sport, suggesting that:

> The frameworks that I've adopted very much come from education and from general teaching and not necessarily in terms of professional practice that an

> exercise psychologist might find themselves in. So I think we're at a point where we maybe need a particular model whereby reflective practice could be counted in a sport and exercise context. I think we can borrow principles form other disciplines as much as we want but…I think we're at that point now where there's sufficient, or the literature is probably reaching a sufficient stage of maturity for that to take place. (Michael)

This participant (Michael) also described how their model selection came about, suggesting their supervisor was influential, with a similar report coming from a current US participant who also introduced students to a specific framework to guide the initial reflective process:

> Typically, in our programme, when we start to introduce our students to this self-reflective piece, (I use) the constructive evaluation tool that came from Terry Orlick's model of the Wheel of Human Excellence (from) back in the '90s when those simple questions are being asked… what went well, what didn't work and then what's the action plan, what's the lesson for next time… (Archie)

This focus on questions was further followed up by the same participant who described how their students were somewhat guided in the RP process by stipulating the inclusion of practitioner questions (as well as reflections) to required formal session notes. Similarly, another participant argued that types of questions were actually more important than adhering to a specific framework:

> Obviously there's the different models that I'm aware of with respect to the Johns or Schön … to me, it's basically a matter of the types of questions that you're choosing in terms of the reflective process, stating it very plainly and simply, but ultimately it does boil down to the nature of the questions you're actually asking the person to reflect upon (Andy)

Further examples of questions were highlighted by Archie:

> Very often they (students) would like to stop at the description of what happened, and that's a typical step, so then I would be probing them and asking questions, "why it's in different types of configurations?" Or I might ask the question, why in terms of, okay, a continuum or our anxiety and comfort level, a continuum of dependence and independence in the delivered services, where were you? (Archie)

*Motivation or desire to engage in RP.* Another example of such attention were the discussions around motivation. One participant summarised that motivation is needed to reflect well:

> I think that there are sufficient minimum requirements for reflective practice but I still feel that if an individual were to really competently develop their reflective practice it would probably be driven by the supervisor they have or by their self-motivation to access additional workshops and courses (Michael)

One Canadian participant described their personal engagement with RP as a qualified practitioner, leading on from earlier educational experiences where RP was not part

of any curriculum or formal requirement: “For me as a practitioner, because it wasn't a requirement, because I've never been required to reflect, I engage in it constantly because I recognise that when I do it, it makes me better” (Megan). However, from a supervisor’s perspective, where RP is embedded within a curriculum, another participant described their perception of their students’ motivation towards RP engagement:

> Most of my students I would rate... they might be extrinsically motivated but it would be high self-determined extrinsic motivation, if not intrinsic motivation, and they do it because they want to be better practitioners and they want to do it to be better practitioners. But I think I have the advantage, in that I have them face to face for two years, and also they share an office and it’s part of the culture of the programme. The new ones coming in understand that that's what’s done and that's expected, and it’s not questioned… it’s not a tick box thing. (Sarah)

This participant went on to also depict how such engagement can initially begin as extrinsic / compulsory, but then transition to more intrinsically driven:

> Every time they [students] do a group presentation they start off with their own verbal “good, better, how.” What was good about it, what could make it better, how can they make that happen, and then each individual in the class gives a good, better, how for that person as well. Now they just do it automatically. If I have two students working together with a group, driving the way back they’re good, better, how-ing and reflecting, the whole car ride back. (Sarah)

In contrast, a criticism was offered of a UK-based programme suggesting that not enough guidance is provided on what exactly should be reflected on, where such freedom could also hinder possible engagement with the RP process.

> The (current) BASES system is too generic and doesn't really get people to reflect on some of the specific competencies that a sports psychologist would need. (For example) one of the requirements in (the previous) BASES (curriculum) was there was a certain amount of team consultations or group workshops or work with a team (to be completed). (Andy)

Also from an engagement perspective, certain methods were described less favourably with one example stating:

> I'd be much more motivated to reflect on decisions that I've made or this that and the other if I'm driving in the car a long motorway journey with a Dictaphone, and then put it in bullet points when I get back home, than having to write the transcript out on my computer, thinking, "What a f****ing ballache this is", type of thing. I think that would probably be something of interest, would make people more intrinsically-motivated. (Andy)

Several other participants also disclosed their perceptions about engagement and motivation associated with written forms of RP, including the perception of others’ feelings towards the process itself e.g., “I just think they [trainees] probably see it as a bit of a bind to write it out” (Andy), and that written RP “can be a bit mind-numbing

(Andy), whereas another suggested that “I think the idea behind it [written RP] is good but by having to write it all out it’s actually turning something that is intrinsic into something that's extrinsic, that's turning into a tick box thing” (Sarah). The promotion of alternative methods of RP aside from writing was suggested. These included the use of video diaries, reflective conversation groups, or reflective interviews/discussions:

> Whether or not, for example, people would find it easy to reflect not in written terms but verbal terms, or video diary stuff maybe? Maybe there’s a different way, rather than sitting down and writing it out on a computer (Andy).

> Rather than it always having to be a very formal kind of written process, if within the local area there's a requirement that every six weeks you meet and you reflect on your practice, not talk about what you're going to do next time, but it's a reflective session, and maybe one of these is looked in on someone, or the supervisor kind of looks at these and provides feedback, if you want, around how you're doing reflection. If you could make it more of an engaging process rather than a formal, "You’ve got to reflect, and you've got to write it down" (Megan)

One participant described how certain methods could be perceived as less time consuming and more efficient:

> I think that some of us would reflect and use more time efficiency by reflecting on Dictaphone, for example, and then maybe putting the key points down afterwards, saying, "Here's briefly what happened, and here's the real key message I can take away here. Now we want the bottom line “kind of thing, so making it a bit more user-friendly in terms of time, but actually they still go through the process. (Andy)

Another participant described how verbal (conversational) reflection with others (shared) was more engaging and could have subsequent impact:

> I think that for it [RP] to be… something that people look forward to engaging in, it's these kind of conversations, or it's sitting in a group reflecting, or maybe within a group reflecting then reflecting personally, but having it more of something that you can almost see the benefit when you talk, I think, more than when you write. And then it stops being just a portfolio for (a qualification)… and you've got to show this much evidence. Stop it being just evidence and make it actually an activity. I think then, as people maybe start to see the benefit more quickly. (Megan)

*5.3.2.4 Outcomes of RP*

Several desired or positive outcomes were highlighted by the participants in relation to RP, emanating from both cognitive (e.g. increased knowledge and understanding) and affective (e.g. increased self-awareness) perspectives. For example, RP was reported as a mechanism for improving self-awareness:

> Very often they (students) would like to stop at the description of what happened, and that's a typical step, so then I would be probing them and asking questions… So then stimulating self-awareness. So it becomes a more

> and more natural way of being a consultant and training to be a consultant. (Archie)

Another participant in agreement indicated, “I think there’s solid evidence that reflective practice … can have benefits in terms of increasing people’s insights about their practice and making people more self-aware as practitioners” (Dave). However, it was also recognised that anxiety is also an outcome associated when trainee practitioners reflect on or about practice (*n* = 4). For example, RP was described as “a personal and intimate process” (Archie), where sharing personal experiences can provoke anxiety in a practitioner or student. Based on this, they went further to say:

> So there could be some anxieties, uncertainties involved in sharing that with the wider public. I mean, one thing is to talk about that with your supervisor; it’s a different thing when we share the instances of failures or successes from our practice with our students within the classroom… So it takes some guts… some professional risk-taking and honesty, integrity, to be able to really self-reflective. (Archie)

Linked to this, other participants indicated that the sport psychology field is highly critical of each other, offering a potential rationale for such anxiety to manifest. For example, one alluded to such criticism within a qualified practitioner population, stating “I think that we do have a tendency to try and screw our own field over a little bit” (Megan), whereas another referred to the potential criticism that may transcend towards trainee practitioners reflecting on their practice:

> I just worry sometimes that the people starting out almost seem as though they’re going to be frowned upon for ... almost people say “why on earth did you ... that was obviously not going to work!” (Michael)

Referring to a more cognitive outcome, another participant also specifically reported the outcomes of using RP via verbal group discussion, such as increased understanding, indicating:

> Sometimes the best reflective practice is that we (students/trainees) come together and just have a discussion with regards to why does something work, why does something not work, so within listening to other people. And I think part of reflective practice that often gets forgotten is other people’s input to help you understand why something has or hasn’t happened. I think a lot of reflective practice takes place individually and of course you’re not getting other people’s insights into why something might have happened. I’m a big advocate of whether it’s group discussion or focus group reflective practice, I don't know, but I do feel that there is an element of importance of considering what just happened with other people. (Michael)

*5.3.2.5 RP research*

Some questions directly relating to the findings of chapter 3 were posed to the interviewees, including questions about sport-specific RP research. Participants

offered several suggestions in response to why they believed the majority of research in RP has been underpinned by qualitative methods. Five out of the eight participants believed that such an approach is a natural methodology to use for such research, for example:

> Most of the things we do in psychology or in the sport sciences is not always very concrete in numbers. It's a process which is applied which means that qualitative research reflects much better what is happening rather than numbers and statistical analysis. (Billy)

Additionally, some (*n* = 3) believed that this type of research is difficult to quantify, "I don't think that's [RP] a very easy thing to measure… I don't know how it [RP] would be done well quantitatively" (Elaine). Finally, two participants felt that some publications about RP are strategic and tactical ways to get 'easy publications', particularly influenced by research-intensive universities; "So you write something about your practice and then you think, 'oh, maybe I'll get a publication from this,' and especially if you work at research intensive universities…" (Dave). It was further suggested that the field notes commonly produced as a by-product to qualitative research, often describing one's experiences during that research process, could (and have) been published under the guise of reflection or RP especially when in some cases, getting more outputs from less data collection is seen as a strategic move within higher education settings:

> I think one of the issues that I see coming through, especially within research, because reflection, or reflecting on the research process is seen as a good part of methodological rigour for qualitative research. So I think people are making field notes, thinking that that's then reflecting on the research they're doing, and then therefore that's what reflective practice is, rather than seeing it as kind of a purposeful activity. And then as a result of that what you're starting to get is people going, "OK, well we made some notes whilst we were doing this study. That was reflecting, because we put it in the method section that we reflected. Let's write a paper on reflecting on this process." I think increasingly people are trying to get to a situation where one study leads to two papers, you know, so rather than there just being a results paper we want a methods paper, we want a reflection paper, and so I think that's probably where some of those issues are coming through in terms of what's actually in the literature. (Megan)

Furthermore, one participant suggested using so called 'attractive' terms in manuscript titles such as 'reflection' may be included to attract editor attention and increase the likelihood of getting accepted:

> There has been a trend of reflections in that sense, showing the world what you're doing to some extent, which is worthwhile, but in that case when you needed to be published, especially in journals, so it has to be shown that you attract the attention of the editors or the reviewers, so you put something in the title which is attractive… Now in that sense I could understand the point

> that some people added the word reflective to attract people to the article. (Billy)

Another perspective offered was that, often in the early stages of research on a topic, vignettes and stories are an adopted approach:

> I suppose like a lot of areas, when the research is starting out there tends to be almost vignettes and almost story approaches. So 'this is how I've managed to develop my practice, this is how I've managed to improve a particular area of what I do…' (Michael)

Others highlighted examples of published literature that arguably, even though the titles would suggest otherwise, were not deemed reflection, but actually just shared descriptions of one's practice. One participant (Dave) stated that such articles 'devalue RP' and create an impression that 'anyone can do it':

> I can remember there was a special issue of the Sports Psychologist, it was probably in the '90s, but there was one recently as well and they do kind of case studies in sports psych practice, so someone writes an article saying 'I worked with the US Olympic team and this is what I did.' But that's not reflection, that's just a diary, and it's useful and it's insightful and if you're doing an applied class it would be interesting to read and stuff, but for me, that's a totally different literature and it probably devalues the work of people working in reflective practice as their main area. It makes it look like anyone can do it. You can just sit there and say 'today I've met with so and so; it was great.'

This participant further suggested "I'd make a distinction if there's a conceptual or a theoretical framework or not, and if there's not they're kind of 'reflections on my experience' or 'reflections about…'" (Dave). It was also argued by another that reflection is such an accepted phase of (qualitative) research that it is not explicitly studied in its own right (Megan): "I think in North America it's (RP) more accepted, and so therefore hasn't been studied" which added to the variety of methods and approaches available may make RP difficult to assess or measure for research purposes.

*5.3.2.6 Summary of Phase One results*

According to the data collected from the participants in the current phase, it was evident that the following perceptions were held:

- RP is seen as a process used to assist and promote experiential learning in trainee sport psychology practitioners across all of the included nations;
- Participants reported a consensus view that a lack of understanding exists with respect to RP in the domain of sport psychology, as previously reported in Chapter 3. Specific reasons for this were attributed to the use of associated terms interchangeably; misrepresentation of RP within the literature which some participants suggested are more akin to descriptions of one's practice

rather than reflection; and potentially strategic publications which devalue the RP process;

- '*Understanding'* is, however, an identified characteristic required *for* RP to be effectively utilised by trainees to assist in the experiential learning process, as well as *motivation* or *desire to engage* in the process;
- Identified positive outcomes *of* RP *engagement* include increased *self-awareness* and improved *understanding*.
- However, increased *anxiety* or *disengagement* could emerge when RP is not adequately supported or facilitated. For example, certain techniques of RP (e.g. *written*) can lead to disengagement when compared with *verbal* or *shared* approaches.
- Finally, the interview itself was identified as a verbal or conversational technique of RP that was positively highlighted.

## 5.4 Phase Two: Supervising and reviewing the RP competency of BASES supervised experience (SE)

### *5.4.1 Phase Two Introduction*

The previous phase set out to explore RP in sport psychology education from an international perspective, where a number of experts within the field of sport and exercise psychology practitioner education provided an overarching view of how RP is typically developed in trainee sport psychologists in each of the participants' respective nations. Findings suggested a lack of understanding of RP was apparent, but simultaneously is required for engagement in the RP process. Improved understanding and self-awareness were identified as positive outcomes of RP engagement, but negative outcomes (e.g., anxiety) could also ensue without adequate facilitation or support.

Given the international focus of the previous study, it was important to also explore RP, still in a sport-based setting, but on a more local level. The BASES SE curriculum was identified as a UK-based sport practitioner development programme which required trainee practitioners to engage in RP as part of their journey to achieving accredited status. Therefore, phase two aimed to explore the RP experiences of BASES Supervised Experience (SE) supervisors and reviewers, who in these roles were responsible for overseeing the facilitation of their supervisees' RP and confirmation of RP engagement respectively.

### *5.4.2 Phase Two Methods*

#### *5.4.2.1 Participants*

Ethical approval was granted from Liverpool John Moores University ethics committee for the research. Inclusion criteria required participants to: (a) hold BASES Accreditation; and (b) to be registered with BASES as a supervisor and/or reviewer at the time of data collection. A list of BASES registered supervisors and reviewers was available on the BASES website. This publicly available list of email addresses was used to contact prospective participants to take part in the study ($n$ = 121). Out of the 121 participants contacted, twenty-one (17.4% of overall pool) supervisors/reviewers responded and completed the survey (supervisor only: $n$ = 8; reviewer only: $n$ = 2; supervisors and reviewers [dual role]: $n$ = 11). On average participants had held BASES accreditation for 9 (± 3.1) years (range: 4.75 – 15). Supervisors had held this position for a mean of 5.0 (± 2.8) years' and reviewers for a mean of 3.9 (± 1.4) years. Participants were from a variety of disciplines (physiology

[*n* = 11], psychology [*n* = 6], biomechanics [*n* = 1], other [*n* = 3]) and a variety of work settings (academic role only [*n* = 9]; applied practitioner only [*n* = 6]; academic and applied practitioner [*n* = 6]). All participants were accredited for scientific support, of which some were also accredited for research (*n* = 4) and pedagogy (*n* = 3). See table 5.2 for summary of participants.

*5.4.2.2 Survey*

Survey research has been recognised as a useful non-experimental approach that suits the multi-disciplinary nature of sport, which can include both quantitative and qualitative methods exploring, for example, prevalence of attitudes, behaviours and beliefs, changes over time or differences between groups (Smith, 2010). A cross-sectional online survey was constructed using Bristol Online Surveys (BOS), split into several sections. The first section asked respondents about their demographic information, including the accreditation route taken (BASES SE; direct application), main accreditation discipline (psychology; physiology; biomechanics; other), type of accreditation (support; research; pedagogy; combination) and duration this had been held (years); main employment type (e.g. academic; practitioner; both), and current role as supervisor and/or reviewer, as well as durations (years) in these positions and numbers of candidates currently and previously supervised and/or reviewed. The second section asked participants to comment on their respective experiences of RP at each of the following stages (where applicable): undergraduate level; postgraduate level; during BASES SE; as a BASES accredited SES; as a BASES SE supervisor; and as a BASES SE reviewer. Participants were given free rein to disclose whatever was pertinent at that moment. The third section asked participants to rate their perceived levels of confidence and competence in each of the applicable supervisor and/or reviewer role, using a simple 0-10 scale (0 = least, 10 = most). The final section invited participants to comment on how they believed the RP aspect of BASES SE could be further enhanced or improved.

*5.4.2.3 Procedure*

Data was collected via the online survey between September and December 2014. In addition to contacting prospective participants via email, additional call-outs were made using social media (e.g., Twitter) with a direct link to the online survey. Once the data collection window had passed, data was downloaded into Microsoft Excel for analysis.

Table 5.2 Summary of participant demographics

| Participant No. | Accreditation Route | Supervisor / Reviewer / Both | Discipline | Accreditation Type | Employment Type |
|---|---|---|---|---|---|
| 1 | BASES SE | Reviewer | Other | Support / Pedagogy | Other |
| 2 | Direct application | Both | Physiology | Support | Academic |
| 3 | Direct application | Reviewer | Physiology | Support | Academic |
| 4 | Direct application | Supervisor | Physiology | Support | Practitioner |
| 5 | BASES SE | Both | Psychology | Support | Academic / Practitioner |
| 6 | BASES SE | Both | Other | Support | Practitioner |
| 7 | Direct application | Supervisor | Physiology | Support | Practitioner |
| 8 | BASES SE | Supervisor | Psychology | Support | Academic |
| 9 | BASES SE | Both | Physiology | Support / Pedagogy | Academic |
| 10 | BASES SE | Supervisor | Psychology | Support | Academic |
| 11 | Direct application | Both | Biomechanics | Support | Academic / Practitioner |
| 12 | BASES SE | Both | Psychology | Support | Academic / Practitioner |
| 13 | BASES SE | Both | Physiology | Support | Practitioner |
| 14 | Direct application | Supervisor | Other | Support / Research | Academic / Practitioner |
| 15 | BASES SE | Supervisor | Psychology | Support / Research | Academic / Practitioner |
| 16 | BASES SE | Both | Physiology | Support | Practitioner |
| 17 | Direct application | Supervisor | Physiology | Support | Academic |
| 18 | BASES SE | Both | Physiology | Support | Practitioner |
| 19 | BASES SE | Both | Physiology | Support / Research | Academic |
| 20 | BASES SE | Supervisor | Psychology | Support / Research | Academic |
| 21 | BASES SE | Both | Physiology | Support / Pedagogy | Academic |

*5.4.2.4 Data Coding and Analysis*

Quantitative data were subjected to descriptive statistical analysis including means and standard deviations. Key data were presented using tables and figures to illustrate main findings and differentiated according to sub-group variables where appropriate. Given the limited opportunity for in depth qualitative responses in the survey, such data were summarised using frequency counts where permitting and representative quotes were used to illustrate key findings.

### *5.4.3 Phase Two Results*

The results section is split into the different timeframes (undergraduate/postgraduate, on BASES SE, as a BASES Accredited SES, supervisor and reviewer (all as applicable). In addition, ratings of perceived confidence and competence to supervise and/or review RP development and/or evidence is reported. Finally, a summary of offered suggestions on how the RP aspect of BASES SE could be further developed or improved is offered.

*5.4.3.1 RP Experience at HE (UG/PG) Level*

Only two participants reported that they were introduced to RP at an undergraduate level. One “was introduced to it (RP), used as part of undergrad dissertation methodology” and the other was “introduced to it (RP) during undergrad lectures”. Both of these participants had been accredited in sport psychology support for over eight years, were both supervisors (range: 1 to 5 years) and one had held an additional reviewing role for 4 years. Both had completed the BASES SE process. Conversely, 43% of participants had no RP experience (*n* = 9), and 43% had minimal experience of RP at this stage (*n* = 7). Other comments (*n* = 3) referred to RP as ongoing but without support, self-directed, and not defined but carried out as part of the studying process.

At a postgraduate level, 38% received no experience of RP (*n* = 8), whereas 9% (*n* = 3) reported some or partial experience of RP during this period and 43% received more thorough coverage (*n* = 9). One participant returned a ‘not applicable’ response. Comments became more varied as the learning stages progressed. Some participants completed a module on RP, whereas others talked about the embedded nature of RP within modules or sessions.

*5.4.3.2 RP Experience during BASES SE*

As shown in Table 4.3, two thirds of the sample (*n* = 14) completed BASES SE in order to obtain accredited status, with the remaining third opting for a direct application to accreditation. It was deemed pertinent to differentiate between participants opting for the BASES SE route given the requirements to evidence RP engagement in SE compared with a direct application.

Table 5.3. Summary of participant demographic data separated by accreditation route

| | BASES SE *(n = 14)* | | Direct Applicant *(n = 7)* | |
|---|---|---|---|---|
| Disciplines | Psychology: | 6 | Psychology: | 0 |
| | Physiology: | 6 | Physiology: | 5 |
| | Other: | 2 | Other: | 2 |
| Supervisor & Reviewer | Supervisor: | 6 | Supervisor: | 4 |
| | Reviewer: | 1 | Reviewer: | 1 |
| | Both: | 7 | Both: | 2 |
| Accreditation type | Support: | 8 | Support: | 6 |
| | Support & research: | 3 | Support & research: | 1 |
| | Support & pedagogy: | 3 | Support & pedagogy: | 0 |

Of those who completed BASES SE (*n* = 14), when asked to comment on their experience of RP during this period, one participant reported “none” (*n* = 1), 71% reported that they used RP ‘regularly’ or ‘often’ during this time (*n* = 10) and 21% (*n* = 3) reported ‘partial’ or ‘some’ experience.

Open responses relating to positive RP experiences during BASES SE included those from an outcome perspective, such as a perception of becoming “more reflective with mentor support” (P1), and that RP helped to “understand the client needs better” (P3). Another reported that RP was a beneficial part of SE (e.g., “A helpful practise in allowing me to develop a sense of what was effective and for which reasons” [P18]). From a more process-oriented perspective, one participant reported beginning to recognise RP as a “conscious process that required evidence” (P6).

Some comments however referred to the challenges associated with RP during BASES SE. These included those associated with lack of understanding associated with RP as part of the SE process, for example, not knowing what to reflect on or the format expected (e.g., “Wasn't always sure however, what to reflect on/the format of this reflective practice” [P12]). Another referred to poorly articulated

guidelines (e.g., “You had to do it but it was not well articulated” [P15]), and another felt that RP was only valuable for certain parts of the SE programme (e.g., a final case study submitted at the very end of the training period: “It only seemed to be important as part of the case study” [P21]). This final point contradicted another participants’ view who perceived RP to be part of the SE process throughout: “it (RP) was involved as part of submissions, and mentoring. Possibly not seen as overtly as it is now, but it was part of the process” (P16). Other participants referred specifically to the training associated with RP during the SE period, which for one was “one workshop” (P19), and for another who, although did not do any specific training in RP, “started to become reflective with support of a mentor during this (SE) process” (P1). Several participants mentioned the input of a supervisor or mentor in the development of RP during the SE period. For example, “(I was) encouraged strongly by my supervisor to critique and review my own work against industry standards” (P18).

*5.4.3.3 RP experience as a BASES Accredited S&ES*

When asked to comment as an accredited sport and exercise scientist, the comments were more varied. Identified themes included those surrounding the importance of RP, along with associated benefits, challenges/barriers, engagement in RP; techniques and frequency of RP.

Several participants (*n* = 4) highlighted the value or importance of RP as a BASES accredited SES. For example, P8 stated “it (RP) forms a key part of my BASES related work and is something I use every day”, whereas another said “This (RP) is something I have spent time developing my understanding and practice as I appreciate the importance” (P15). The other two participants in addition also referred to some of the associated benefits of RP, which included assisting with *not generalising,* improved *confidence*, and also alluding to *self-awareness,* for example:

> (I) rely heavily on my ability to reflect and hone my practises to ensure I am not generalising between athletes and populations. (I) have much greater confidence and as such am more likely to acknowledge areas I need to improve in. (P18)

Another (P3) also suggested RP helps with *troubleshooting* and in the development of *independence* (e.g., “reflective practice is an excellent method to learn from your own engagement with the subject area. It helps with troubleshooting and becoming a more independent practitioner” (P3)). However, some barriers or challenges were also mentioned within the survey responses (*n* = 2), which included *time* and the impact this can have on ones RP: “Less formal (RP) due to time” (P20). Another suggested that RP was useful, yet also described it as having “a bit of a

negative halo" and that it "seems to be more psych relevant" (P2). Three respondents also commented specifically on the motivation required for RP engagement as an accredited SES, using terms such as "self-driven" and "self-directed".

Different methods or modes of RP used referred to the development of a personal/bespoke RP process, but these were absent of specific details. For example, one stated that "RP has developed for me organically through experiences rather than any formal explicit process" (P9), with another suggesting they had "developed (my) own strategy; (RP) fits into busy lifestyle" (P5). P9's comment also suggested that their RP process was an *informal* one, which was also echoed by P14 who stated their RP experience was "Informal and (involves) lots of peer to peer RP" (P14). Three respondents specifically mentioned their RP experiences as involving *others* or being a shared process, including discussions with supervisors, colleagues and clients. Others reported their RP experiences as including reading of the RP literature (*n* = 2); attending a workshop (*n* = 1), and one mentioned the use of an RP framework (*n* = 1: "(I) feel much more informed now due to current articles on reflective practice in the sport psychology literature (and being) aware of reflective practice models e.g. Gibbs" (P12).

In addition, participants (*n* = 6) also provided insight into the frequency associated with RP as a SES, with two suggesting that RP was a regular process. More specifically, one referred to RP as a daily process (e.g. "it forms a key part of my BASES related work and is something I use every day" (P8), whereas another used RP "on a monthly basis" (P13). The other two responses were a little less specific, including "often as required by the SE process" (P10) and "Most of the time, after any support work, I reflect and self-evaluate" (P11).

#### *5.4.3.4 RP Experience as a BASES Supervisor*

When asked to comment on RP experiences as a BASES supervisor, participants could freely choose how to respond or comment, including the focus of their experience. Some referred to their own experiences in these given roles, whereas others referred to the RP experience of candidates under their supervision, for example. Key themes identified within the survey responses included the role of the supervisor in supporting RP, supervisor's perception of supervisee's RP, supervisor's own/promoted RP processes, and RP methods/frequency/depth.

Comments (*n* = 6) referred to the role of a supervisor in the development of RP within their respective supervisees. Some implied that such development relies on a transfer of supervisor knowledge and understanding of RP: "I use my own knowledge and understanding to develop my supervisees approach" (P15) and

“knowledge of being a reflective practitioner helped impart some of the knowledge to my supervisee” (P3). Others (*n* = 4) used less direct terminology in describing their role in supporting RP development, such as *encourage*, *promote* and *make aware:* “Important to make the supervisee *aware* of the needs and benefits” (P21); “*encouraged* supervisees to develop own (RP)” (P5); “I *encourage* it (RP) throughout and find it useful for encouraging SE students” (P2); “I *promote* reflective practice from the start of SE” (P12).

In addition, some disclosed their perception of RP within the SE process, including one suggesting that RP develops over time throughout SE (e.g., “It is a skill that is developed throughout the SE process” [P12]), whereas others reported associated challenges. For example, “it can be challenging to understand whether those who I am responsible for are reviewing and critically appraising their work especially through the written word. Having closer access to supervisees makes this process much easier” (P18). This could be alluding to the proximity of supervision that may exist (e.g. supervising from a distance), or the subjectivity in the process of RP (difficult to measure). Another perception raised was around RP understanding (e.g., “I believe many students don't really understand what it is, and most reflections are superficial” [P16]). Depth of RP was also highlighted by another, who stated “It (RP) can also be more content/descriptive in nature than reflecting on feelings” (P12).

As mentioned at other timepoints (e.g. BASES SE, as an accredited SES), a common theme was around RP methods, with the most frequent being shared or group RP (*n* = 5). Shared RP was used as part of the supervisory process with supervisees (e.g., “Regular shared reflection with supervisees” [P4]) but also as part of the supervisors ongoing practice in this respective role (e.g., “I am now co-supervising one candidate with a more experience supervisor, this has afforded an opportunity to reflect on my supervision and discuss and learn from another. As a new supervisor continual reflection is really important” [P6]). In addition, two supervisors referred to their RP as ‘informal’ (e.g., “RP has developed for me organically through experiences rather than any formal explicit process” [P9]) and another (P7) suggested RP was ‘self-directed’ which could also suggest an individual process. In addition to methods utilised, frequency of RP was also described by four supervisors, using the terms *often*, *regular*, *monthly*, and *every day* to describe their RP engagement. For example, “it (RP) is something I use every day to a greater or lesser extent” (P8).

*5.4.3.5 RP Experience as a BASES Reviewer*

When asked to comment on RP experiences as BASES reviewer, participants once again could choose the focus of their response. Many (*n* = 6) referred to their perceptions of RP within the SE curricula from a reviewer's perspective, with both positive and negative views presented. Some of the more favourable included comments on *depth* of reflection (e.g., "reassuring to see a greater level of reflection in more recent submissions" (P21)), variety of utilised *methods* (e.g., "useful to see different methods and the influence of the supervisor in encouraging RP" [P2]) and *frequency* of engagement (e.g., "some candidates have grasped the concept and are engaging regularly in reflective practice. I have read reports that are excellent accounts of everyday engagement with the client, scientific support and professional development" [P3]). However, others have reported a more negative perception/associated challenges of RP within SE as a reviewer, including a lack of understanding of the SE candidate and depth of RP (e.g., "I believe many students don't really understand what it is, and most reflections are superficial" [P16]), a lack of prioritisation (e.g., "My experience of candidate portfolios, is it is clear when supervisee and supervisor do or do not prioritise this" [P13]), and finally, poor evidence of RP (e.g., "I've had pretty poor evidence submitted to me as a reviewer so far of reflective practice taking place, (even) beyond the workshop" [P12]). An additional comment referred to the reliance on supervisors' feedback, thus implying a lack of objectivity in the reviewing process of RP evidence (e.g., "Very difficult to assess this remotely and rely heavily on the feedback of the supervisor" [P18]).

There was also a selection of reviewers who commented on their own personal experiences of RP in this given role (*n* = 3). Two of these specifically referred to the ongoing learning that takes place from a RP perspective, even as a qualified or accredited professional. For example, one described their RP experience as "implicit" and that "(I) often have to read new research, discuss with other practitioners etc when I find a gap in my knowledge to support the review process" (P1). Similarly, a neophyte reviewer shared:

> I am just starting out on review and co-review is helpful. I was able to compare my observations and feedback to those of the co-reviewer but also identify limitations in my report of these and address them. Reflections from this also inform supervising. (P6)

*5.4.3.6 Perceived Competence & Confidence*

All respondents were requested to rate their perceived levels of confidence and competence to oversee the RP aspect of BASES SE, whether as a supervisor,

reviewer or both (dual role) using a basic 0 - 10 Likert scale (least to most). Supervisors reported a median rating of 7 out of 10 for both 'confidence' (IQR: 6-8.5) and 'competence' (IQR: 6-8). Reviewers reported a median score of 6 out 10 for 'confidence' (IQR: 4.25-8.75) and 7 out of 10 for 'competence' (IQR: 6-8). Reporting data as means (± SDs), supervisors elicited 7.29 (± 1.82) out of 10 for 'confidence' and 7.33 (± 1.71) for 'competence', whereas reviewers were at 6.31 (± 2.44) out 10 for 'confidence' and 6.75 (± 2.15) out of 10 for 'competence'. These data were further analysed according to discipline alignment (Table 4.4), accreditation route (Table 4.5), and split by duration of accreditation (Table 4.6).

Table 5.4. Perceived confidence and competence according to discipline group (mean score on self-rated Likert between 0-10)

| | Confidence (0-10) | | Competence (0-10) | |
|---|---|---|---|---|
| | Supervising | Reviewing | Supervising | Reviewing |
| Physiology (*n* = 11) | 6.82 | 5.78 | 7 | 6.4 |
| Psychology (*n* = 6) | 7.5 | 6.67 | 7.33 | 7 |
| Other (*n* = 4) | 8.25 | 7.67 | 6 | 7.67 |

Table 5.5. Perceived confidence and competence according to accreditation route (mean score on self-rated Likert between 0-10)

| | Confidence (0-10) | | Competence (0-10) | |
|---|---|---|---|---|
| | Supervising | Reviewing | Supervising | Reviewing |
| BASES SE (*n* = 14) | 7.14 (*n* = 14) | 6.09 (*n* = 11) | 7.14 (*n* = 14) | 6.64 (*n* = 11) |
| Direct Application (*n* = 7) | 7.57 (*n* = 7) | 6.80 (*n* = 5) | 7.71 (*n* = 7) | 7.00 (*n* = 5) |

Table 5.6. Perceived confidence and competence according to experience (mean score on self-rated Likert between 0-10)

| | Confidence (0-10) | | Competence (0-10) | |
|---|---|---|---|---|
| | Supervising | Reviewing | Supervising | Reviewing |
| < 8 years accredited (*n* = 10) Range: 4.75 - 8 years | 7.70 | 7.14 | 7.60 | 7.14 |
| > 9 years accredited (*n* = 11) Range: 9 – 15 years | 6.91 | 5.67 | 7.09 | 6.44 |

*5.4.3.7 Future suggestions for RP within BASES*

All respondents were asked their opinion on whether any formal RP training would be of benefit to their respective roles, and to provide reasons for their responses. Seventy-one percent (*n* = 15) of participants believed that formal RP training for supervisors was indeed warranted, specifically from the disciplines of psychology (*n* = 5/6), physiology (*n* = 7/11), and 'other' (*n* = 3/4). In addition, eighty-six percent (*n* = 18) believed RP training was necessary for BASES reviewers, where responses per discipline group included psychology (*n* = 4/6), physiology (*n* = 10/11), and 'other' (*n* = 4/4).

The reasons given for/from a supervisor's perspective were split into three categories: no, tentative yes, or definite yes. Those who were certain that such RP training should exist (*n* = 10) gave a variety of reasons. The most frequent reported was to support others RP (*n* = 4). For example, one suggested that such training would provide "methods of facilitating reflection and allows supervisors to understand demands of (BASES) SE as this changes regularly" (P10). Similarly, another suggested that such training could be incorporated into the supervisor training: "So, once accredited, if individuals go on the supervisor training course - a reflection reminder could be included in there (focusing on how you could support others to reflect)" (P20). Another reason provided related to the current formal education on RP being insufficient (*n* = 2). For example,

> Undergraduate/postgraduate and most education promote acquisition of knowledge through 'telling'. However, true learning only occurs through reflective practice. In my own development and through mentoring others RP is done poorly. It is essential that supervisors relate the importance of the subject to those who are under their charge. (P1)

Other reasons included to ensure a consistent approach, to learn about other RP methods and seek examples of these. In addition, another participant stated that they are "often supervising 'blind' in this area (RP)" (P7), which is somewhat supported by another supervisor who suggests further guidance is needed:

> Whilst I think that the SE process and being engaged in delivering sport and exercise science demands good reflective skills, I am not as up to date on the current literature as to "best" reflective practice models. I am tempted to attend one of the SE core workshops in this regard. (P6)

Of those who were a little more sceptical/tentative about further RP training for supervisors (*n* = 5), comments mostly included caveats/stipulations, including dependence on the intended content and delivery, and it being "fit for purpose" (P16).

Another, while agreeing that training was needed, also added: “Although I am not convinced that it is needed or there would be good take up of this” (P9), and another responded “Yes although I would be concerned about being to taught 'to suck eggs'” (P11).

The respondents stating ‘no’ to further RP training gave the following reasons: supervisors are or should already be competent in supervising the RP element of BASES SE (*n* = 2); alternative methods to a workshop were offered (e.g. an online guide) (*n* = 2); one suggested that RP was an individual process to them as a supervisor (*n* = 1), and another that RP was only one aspect of SE (*n* = 1), perhaps indicating that no other areas have such a focus.

From a reviewer’s perspective, *n* = 18 agreed that further RP support was warranted, and of these *n* = 13 provided a certainty to this. The most common response in support of further RP training was about consistency (*n* = 6). One suggested that training “would provide standard information regarding how reflection should be reviewed as it is a subjective process” (P10) with another suggesting a need for “guidelines so reviewers are consistent with expectations of reflective practice throughout the SE process” (P12). Other reasons included the difficulty in judging RP competence: “I think in reviewing it is difficult to assess reflective practise and a course which helps with this would be welcome” (P18), with some suggesting guidance for reviewers to help alleviate such challenges would be useful and could “demonstrate how you may be able to judge competence” (P17).

Of those suggesting no further training is needed for BASES reviewers (*n* = 3), reasons offered were similar to those provided for the supervisor perspective, including an assumption of competence (e.g., they should already be well versed at supervisor/reviewer level” [P5]), and, the view that RP is only one aspect of BASES SE.

Finally, another opportunity to suggest ideas for how supervisors and reviewers could be supported in their RP was provided. Responses here identified three distinct categories: mode of delivery; suggested guidance format; and types of examples. The most suggested mode for such RP support to supervisors and reviewers was utilising online mechanisms (*n* = 6). For example, one participant stated: “I've delivered a number of webinars which have reached far more people that doing formal workshops. Twitter chats that run along webinars have increased engagement substantially” (P1). Another provided support for this, suggesting “regular webinars or Skype workshops on the topic would be ideal as getting people in a room is hard” (P7). Other suggestions included a specific workshop or a forum: “perhaps an optimal supervisor / reviewer workshop on reflective practice for the

sports practitioner would be good. Or some form of forum where good practice models and new ideas could be shared" (P6).

Suggestions were also provided regarding the format for guidance on RP. The suggestions which were varied but worthy of inclusion, were a flowchart of RP processes ("Perhaps a flowchart of best practice for the process of reflection" [P11]); guidance on how to assess levels of RP ("techniques to assess the level of reflective practise being undertaken [P18]); access to the resources that supervisees receive about RP ("Access to resources given to supervisees would be useful" [P6]); and access to experts in RP through BASES ("Key experts to offer advice (through agreed BASES consultancy) would be useful" [P7]).

Finally, the request for more examples of RP was a common response observed from the survey. For example, one suggested "online tutorials that show good examples of reflective practice that are simple to use and underpinned by contemporary theory" (P8), whereas another suggested a "video of a supervisor/supervisee reflection session" (P10). Furthermore, another stated it would be "useful to see exemplar reflections… (including) any guidance/formatting for reflections" (P12) whereas another suggested that a "case study, real-world examples approach would be best" (P19).

### *5.4.4 Summary of Phase Two results*

The data collected within the online survey from the participants in the current phase revealed the following perceptions:

- *RP experience*

The survey data suggest that current supervisors and reviewers had minimal exposure to RP within formal education settings when reflecting back on their time as undergraduate and/or postgraduate students. Of those who completed BASES SE, most participants reported regular use of RP within their respective training, but such experiences were mixed, with several alluding to challenges around the RP aspect of SE (e.g., ambiguous guidelines about the required format and content of reflections). Furthermore, commenting from the perspective of a BASES Accredited Sport and Exercise Scientist, again experiences were varied, but overall suggested that RP was indeed perceived as an important and valuable process.

- *RP confidence and competence*

Self-reported perceptions of confidence and competence to supervise and/or review the RP aspect of BASES SE was reportedly high. However, those from the psychology discipline perceived themselves to be more confident and competent

when compared to other discipline groups. Those who did not complete BASES SE (i.e. direct application) also perceived themselves to be more competent and confident in their respective roles compared to those who engaged in BASES SE. Finally, those with less experience in years (< 8 years) perceived themselves to be more competent and confident to support RP than their more experienced (> 9 years) counterparts.

- *Participant recommendations for RP*

A consensus view amongst participants suggested a need for specific training for supervisors and reviewers in the area of RP, which was attributed to providing consistency for delegates and to remain up-to-date with developments. Suggestions for improvements to the current BASES scheme in relation to RP included those relating to mode of delivery of training opportunities (e.g., more remote / online platforms for efficiency); a desire to have some guidance on *supporting* RP (e.g., flowchart of good practice, how to assess levels of RP); and availability of more types of RP evidence examples to assist in supporting the RP process of trainees.

## 5.5 Phase Three: Delegate perceptions of a RP workshop: a summary of evaluation data

### *5.5.1 Phase Three Introduction*

Phase two of the present chapter aimed to explore the RP experiences of BASES supervisors and reviewers (up to the present day), who in their respective role/s were responsible for supporting the development of trainee sport and exercise scientists in becoming accredited SES practitioners. Findings revealed that the RP experience was varied at each stage of exploration, but RP engagement became more frequent during the BASES SE process. Perceived confidence and competence to reflect as a supervisor and/or reviewer was ascertained, which was reportedly high across the sample. In addition, some of the benefits and barriers were described by the participants, along with suggestions for how to improve the RP aspect of BASES SE.

Whilst the findings in phase two above enable an increase in ones understanding of the RP journey to becoming a SES practitioner, or beyond into a supervisor or reviewer role, many of the participant sample may not have experienced (as a trainee) the BASES curriculum currently in place for developing and facilitating RP in trainee sport and exercise scientists. Furthermore, the research design of phase two required participants to rely on memory recall in sharing their respective RP experiences, which for some was over several years. Therefore, in order to ascertain a more contemporary perspective of RP development within BASES SE, the present phase aimed to analyse completed post-workshop evaluation forms from trainee SES practitioners (delegates) attending the BASES RP workshop.

### *5.5.2 Phase Three Methods*

#### *5.5.2.1 Workshop Description*

A 6-hour workshop on reflective practice forms part of a compulsory package of workshops for those engaged in BASES Supervisory Experience (SE). The workshop aims to explore different types of knowledge, and how this can be developed through RP; to appreciate and apply different theoretical models of RP; to utilise RP as a tool for self-development; and upon completion of the workshop, be able to record and evidence RP. To date (2016), this workshop has been delivered 21 times since 2010 to a total of 250 delegates. All delegates attending BASES workshops are requested to complete an evaluation form (see evaluation tool section below).

*5.5.2.2 Evaluation tool*

The RP workshop evaluation form (see appendix 3), which was designed by BASES to monitor workshop perceptions, included space for delegates to comment on strengths of the workshop, recommendations to improve the quality or effectiveness of the workshop, 'yes/no' responses about enjoyment, value for money and intentions to attend future BASES workshops, as well as anonymous delegate/demographic information (e.g., membership type, accreditation/SE status).

*5.5.2.3 Participants*

Participants were delegates who attended a BASES reflective practice workshop delivered between 2013 and 2015 (*n* = 96) consisting of professional (*n* = 30), student (*n* = 40) and graduate (*n* = 5) BASES members (non-disclosed membership: *n* = 21). Forty-five (*n* = 45) delegates disclosed they were engaged in BASES SE, however, this is likely to be more given that the workshop was a core/compulsory workshop.

*5.5.2.4 Research Design and Procedure*

Secondary data analysis refers to the analysis of data previously collected by someone else for another primary purpose. Using such existing data has been found to provide a feasible option for researchers who may have limited time or resources (Johnston, 2017). The administration team at BASES as part of their ongoing processes collate delegate evaluation forms which are completed upon each workshop conclusion, and upon receipt to the main office are transcribed to produce an overall workshop evaluation per delivered workshop. Therefore, BASES as the gatekeeper was contacted and asked permission for access to the anonymised and summarised evaluation data for the RP workshops (*n* = 6) delivered between 2013 and 2015 for the purposes of the present research. The evaluation summaries form the data to be analysed in this study phase.

*5.5.2.5 Data Coding and Analysis*

The data obtained via the summative workshop evaluations were analysed by listing the key responses and their respective frequencies. Exemplar quotes were also used to illustrate commonly reported views from workshop delegates.

### *5.5.3 Phase Three Results*

*5.5.3.1 Workshop Strengths*

Analysis of the workshop strengths suggested three discrete areas: content, process, and outcomes. A frequently noted content-focused strength related to the RP examples provided in the workshop. These included personal experiences or real-life RP scenarios offered by the presenter, but also examples relating more specifically the process of RP (evidence, depth, linked to SE). For example, one delegate from the May 2013 workshop commented "covered both examples that aid applied practice and those that demonstrate reflective practice for SE submissions" with another (in June 2013) highlighting the impact of such examples on learning: "lots of practical examples and "real world" scenarios allowing me to develop an improved understanding." Another commonly reported strength was regarding the interaction and discussion-based activities involved in the workshop, represented by comments in the 'workshop strengths' section such as "group activities and interaction with members of the group were very informative and useful" (June 2013) and "group interaction with other people on supervised experience, relevant personal experiences/example from the presenter which you can relate to" (June 2015). Other content-specific strengths included those relating to the RP models and frameworks covered (*n* = 7), RP techniques (*n* = 5) and new or innovative ideas for RP (*n* = 4).
In terms of the workshop process, the educators' delivery was highlighted as a particular strength (*n* = 45), who overall were described most commonly as knowledgeable (*n* = 10), friendly (*n* = 4), enthusiastic (*n* = 4) and engaging (*n* = 5). A total of three educators were involved across the analysed workshops, with either one or two present at each. Another strength highlighted was the applied and contextualised nature of the workshop, for example: "the style of delivery was great, varied and made the information clear to understand and take on board, the balance of theory and application was spot on" (Feb 2014). Finally, structure of the workshop was deemed a strength, described as "easy to follow", "aligned to BASES SE", adopting "a step by step process", as well as being: "well-structured and gave a lot of learning material and interactive tasks which aided and enhanced learning" (May 2013).

Many delegates disclosed information about their perceived outcomes of the session, some of which were directly related to learning including, increased knowledge and understanding (e.g. deeper thought; more clarity; increased understanding), improved skills (e.g. RP skills and efficiency), and changed attitudes or beliefs (e.g. increased confidence). Other delegates provided reactions to the workshop upon completion, which was most commonly described as "informative" (*n*

= 14). Other responses included enjoyment (*n* = 4), usefulness (*n* = 4) and increased self-awareness.

*5.5.3.2 Workshop Recommendations*

All delegates were asked to provide recommendations for the workshop they had just completed. Data was analysed and once again, split into the same categories as previous: content, delivery and outcomes. The most common response presented from a content perspective was once again relating to examples, specifically that more could be provided (*n* = 13). More specific comments focused on wanting more examples of RP from a qualified practitioner perspective, requesting more real life or practice examples of RP (e.g. “maybe some ‘real life’ examples from practitioners” June 2014), with some wanting more specific examples relating to their own discipline (e.g. “more examples of how it can be relevant for physiologist” June 2013). Other comments referred more practically to things that would benefit the current BASES SE process of being a trainee practitioner (e.g. “ideas of incorporating examples into our portfolios” June 2014; “examples of more templates” Feb 2014). Another recommendation related to the interaction and discussion elements of the workshop (*n* = 9), where some delegates suggested more interaction with peers would be advantageous (e.g. “would have liked the opportunity to discuss practice and (RP) definitions with a range of peers in room” June 2014). Others recommended more tasks (e.g. “more tasks/moving around the room – help with meeting more people on the workshop” June 2015), whereas another suggested more application of what was discussed would be advantageous (“More chances to apply what was being discussed. Lots of discussions but only a few chances to write a reflection” June 2014). Finally, a variety of RP techniques were mentioned in the recommendations offered, including audio, video, mind-maps, models, written RP, as well as RP templates and hearing more about the tutors’ own personal methods of RP (e.g. “Video examples that could be analysed” June 2013), suggesting that more support in using these methods would be useful rather than simply mentioning them as options for RP.

From a delivery perspective, several suggestions were offered including the timing of the workshop within BASES SE. Two participants suggested that the workshop should be completed very early on to support RP within the SE process, for example: “Having the opportunity to do the workshop nearer entry workshop to help with SE reports. With no real prior teaching of reflective practice, difficult to write/practice before the workshop” (Feb 2015). Seventeen delegates referred to time, with nine specifically suggesting that the workshop could be reduced in length.

Perhaps linked to this, another suggestion included the idea of pre-reading to be completed before the workshop: “several points laboured… arguably too much content, possible pre-reading” (June 2014).

Finally, from an outcome perspective, two delegates suggested that a follow up discussion forum could be a useful way of continuing the support for the RP process beyond the one-day workshop. Additionally, another suggested that it would be useful to bring along a real-life scenario, to work on during the workshop and by the end of the day leave with a completed example of RP as evidence for their portfolio (e.g. “would have been good to be asked to bring a specific situation and actually complete a reflection using a model which can subsequently be submitted as part of evidence” June 2013). Another suggested that it would be useful to hear about evidence of the impact of RP (beyond the workshop), both from a positive and negative perspective.

#### *5.5.3.3 Summary of Phase Three results*

The summarised data extracted from post-workshop evaluation forms revealed information about both strengths and recommendations, whereby data was organised into three areas: content, delivery and outcomes. From a content perspective, the main strengths to be highlighted were the examples provided in the workshop, which include experiential ‘real world’ examples, or practical examples to assist the RP process. However, recommendations to improve the workshop content also referred to the same ideas, where delegates suggest that more examples are needed, and more interaction would be useful. From a delivery perspective, the actual workshop educators themselves were highlighted as strengths on all summarised evaluation forms, whereas recommendations were mainly associated with time; either timing of the workshop being early in the BASES SE process, but also that the workshop duration could feasibly be reduced. Finally, the described positive outcomes of the workshop were mainly cognitive or affective in nature, where examples included improved knowledge, understanding and learning, changed attitudes and beliefs, and increased confidence to use RP. However, outcomes in the recommendations section were mainly practical suggestions, including how the workshop could be followed up beyond the one-day workshop (e.g. an RP forum, or to leave with a completed piece of RP evidence).

## 5.6 Discussion

The purpose of the present chapter was to further understand RP in the context of sport. In relation to the overall aims of the thesis, the present chapter aimed

to critically explore knowledge, understanding and engagement in RP in the domain of sport; examine both international and local perspectives of sport practitioners in respect of RP within educational and professional development settings; and to provide future recommendations for practice and professional training frameworks in sport regarding RP. The current chapter was split into three separate phases. The aim of *phase one* was to explore RP in sport psychology education from an international perspective. *Phase two* aimed to explore (both past and present) RP experiences of BASES SE supervisors and reviewers. Finally, *phase three* aimed to analyse completed post-workshop evaluation forms from delegates attending the BASES RP workshop. The findings of the overall chapter are summarised in table 4.7, where themes transcending across all three phases are included. Such themes include the factors contributing to RP engagement, the outcomes experienced as a result of RP engagement, and a summary of recommendations for future research, practice and professional development with respect to developing practitioner RP.

*5.6.1 Factors contributing to effective RP engagement*

A lack of understanding of RP was reported in chapter three through analysing the literature published in this area, which previous research has reported has had negative impact on subsequent engagement (e.g., Cropley et al., 2012). This finding was also confirmed in phase one of the present formative study where, in summary, 'reflection' was purported as a term used frequently in everyday language and has multiple uses, and therefore it is easy to use as a 'word' rather than a specific concept/process. Exploration of RP experience within a more local SES setting in phase two, specifically within BASES supervisors and reviewers, revealed that typically, RP was not explicitly taught or facilitated in the respective participants UG or PG courses Instead, participants in phase two reported that they were typically only introduced to RP as part of the BASES Accreditation process, where it was first *introduced* to SE in 2002, and where evidence of engagement was *required* from 2009. Exploration of participants' recalled experiences over time, as a trainee Sport and Exercise Scientist on BASES SE (where applicable), and subsequently as a BASES Accredited Sport and Exercise Scientist speculates that understanding of RP increased when compared to their earlier HE experiences. However, specific data to quantify such increases in understanding over time was not collected and thus further research to explore such development is still required.

Furthermore, reflecting upon their role as BASES supervisors and/or reviewers, the majority of participants also suggested that even though they perceived themselves to be confident and competent, more training to support others' RP was

still warranted. Indeed, it was perceived that more training may further improve both their own and their supervisees understanding of RP, as well as increase their perceived competence and confidence in this facilitative role. Analysis of the delegate evaluation data in phase three did however suggest that the RP workshop had a positive impact on RP delegates understanding, which according to prior research (Cropley et al., 2012), could have a positive impact on future RP engagement. However, given the snapshot research design, exploring engagement further was not possible and warrants further examination.

A variety of techniques and methods of RP were also described throughout each of the phases, which seemed to be specified within an academic piece of work or assessment, or utilised because ones supervisor suggested them to do so, which could also contribute to the perception that a lack of understanding exists with regard to RP.

Another theme extracted from the data focused on *RP facilitation*. In phase one, the majority of participants themselves were in facilitation roles overseeing either sport psychology students or trainee practitioners as mentors or supervisors. These roles also included the facilitation of RP, which was varied in nature given the international variance of the population sample. Within phase two, RP facilitation was more specific and participants retrospectively reported that was mainly evident through their respective BASES supervisor (where applicable). Furthermore, a BASES supervisor has a remit for supporting the development of trainee Sport and Exercise Scientist skills and competencies (see appendix 1 for an overview of these), including RP. However, many of those participants currently in a BASES supervisor role had not received any formal RP training for themselves as practitioners, nor training on how to support others' RP. Exploring the disclosed BASES SE completion timeframes (if at all), or the dates they were awarded BASES Accredited status, and subsequently entered into the supervisor role, it is likely none completed the BASES RP workshop which is now a compulsory element of the BASES SE programme.

In contrast, RP facilitation within phase three was specifically evident through the RP workshop where delegates were educated about RP as part of the BASES SE programme (see appendix 4 for a summary of this content). Upon completion, the data from the evaluation forms suggested that the delegates understanding of RP had somewhat increased suggesting that learning had indeed taken place. Whilst it is not clear what specifically led to such perceived improvements, the workshop data described the workshop facilitators using terms such as *knowledgeable*, *enthusiastic* and *engaging*, which supports some of the qualities thought to be required by those in RP facilitator roles. For example, an RP facilitator (e.g., someone who supports the

learning about and/or process of RP) should possess certain skills or characteristics in order to best support learners, which include counselling skills such as listening and empathy (Knowles et al., 2001), as well as being knowledgeable about RP, respected and able to instil a desire to learn (Culver, Trudel, & Werthner, 2009). Paget (2001) further highlighted that an RP facilitator should be caring, supportive, competent, and able to deal with strong emotions. More recently, Koh et al (2015) suggested that one's motivation or desire to engage with RP could also be affected by the worth they see in the facilitator's recommendations to do so. Considering the findings of phase three, whilst the RP facilitation received within the workshop setting was deemed very positive, such facilitation is only one aspect of the much broader BASES SE curriculum, and the subsequent or wider RP facilitation that may indeed take place (e.g., by the supervisor) cannot be ascertained from the present research. Therefore, further exploration of RP facilitation beyond the RP workshop is still required to determine how RP processes can be best supported and related skills developed over a longer duration throughout a training scheme such as BASES SE and in the pursuit of developing confident and competent practitioners of the future in SES.

### *5.6.2 Outcomes of RP engagement*

When considering one's engagement in RP, a number of outcomes were reported by participants within the present chapter, whether based on own personal experiences, or based on those outcomes observed in others (e.g., students or trainees). Commonplace across all three phases of the chapter was the perception that RP engagement helped to increase self-awareness, confidence and understanding. Such findings are congruent with previous literature where similar outcomes are reported and discussed (e.g., Cropley et al., 2012; Faull & Cropley, 2009; Knowles et al., 2007). However, not all outcomes of RP engagement were indeed positive, with some participants suggesting that negative emotions (e.g., anxiety) can occur, leading to feelings of low confidence and thus potentially creating barriers to learning (Norman & Hyland, 2003). The negative outcomes of RP engagement were less evident than the comparative positives, which may be a result of participants themselves being strong advocates of the RP process. Therefore, it is important to further explore in-depth experiences of RP to clearly ascertain how these listed outcomes of RP engagement are realised, so that effective support processes can be implemented for those individuals required to engage in RP.

Table 5.7 Summary of chapter findings in relation to RP experience and engagement

| | **Phase One: Interviews with international sport psychology educators & practitioners** | **Phase Two: Online survey completed by BASES supervisors and reviewers** | **Phase Three: Analysis of delegate evaluation forms from BASES RP workshop (2013-2015)** |
|---|---|---|---|
| Characteristics for RP engagement | *Understanding RP*<br>• Participants confirmed that a lack of understanding in literature exists and that the literature on RP is confusing<br><br>*Facilitation of RP*<br>• In the UK and Australia, supervisors supported RP in trainees;<br>• In other countries, as part of a HE course, tutors facilitated RP<br><br>*Techniques of RP*<br>• Utilised techniques included: written, verbal, individual, shared, formal, informal<br>• Technique can affect engagement (e.g. written RP not always viewed positively) | *Understanding RP*<br>• RP was not taught / included within earlier education pathways (e.g. pre-BASES SE) and the BASES RP w/shop was not available for most participants;<br>• However, participants suggested that specific RP education / training for BASES supervisors / reviewers is still needed to better support supervisees' RP<br><br>*Perceived Confidence and Competence to use RP*<br>• Self-reported confidence & competence to support others' RP was reportedly high;<br>• Those aligned to psychology perceived to be more confident and competent than those in other disciplines;<br>• Those who obtained BASES accreditation via direct application (i.e. without supervision) were more confident and competent than those who experienced BASES SE;<br>• Less experienced participants (≤8 years' experience) were more confident and competent than those with more (≥9 years) experience<br><br>*Facilitation of RP*<br>• RP was mostly supervisor driven as a trainee<br>• Once accredited RP was reported as a self-driven process, but 'others' were frequently mentioned too (e.g., colleagues, peers).<br><br>*Techniques of RP* | *Understanding RP*<br>• Delegates reported that the workshop increased their understanding of RP (e.g., knowledge, skills, beliefs)<br>• Recommendations which may lead to further increases in understanding included:<br>- attention to individual needs (e.g. discipline-specific guidance),<br>- pre-reading (or activities) for completion prior to workshop attendance,<br>- more RP examples from experienced reflectors / practitioners<br><br>*Facilitation of RP*<br>• Workshop educators were highlighted as engaging, knowledgeable, and enthusiastic about RP<br><br>*Perceived Confidence and Competence*<br>• Some (*n* = 2) highlighted an increased confidence to reflect upon workshop completion<br>• Some perceived improved RP skills after attending workshop<br><br>*Techniques of RP*<br>• Discussed in the workshop content (see appendix 4) |

| | | | |
|---|---|---|---|
| | | • Variety of techniques mentioned, but described mainly as *informal* | |
| Outcomes of RP engagement<br><br>*(suggested by participants)* | • Facilitates learning from experience (ELT)<br>• Increased knowledge and understanding<br>• Increased self-awareness<br>• RP can lead to experiencing anxiety for some individuals (e.g. due to uncertainty, lack of understanding, or when sharing experiences with others) | • Increased awareness (of self and others)<br>• Increased confidence within practice settings<br>• Can support troubleshooting processes<br>• Increased independence as a practitioner<br>• Recognised as being applicable in a wider context than 'professional practice' – for some, RP is a process used in everyday life | Outcomes of *workshop* specifically resulted in:<br><br>• Increased understanding (e.g. of RP techniques)<br>• Increased confidence to engage in RP<br>• Increased awareness (of RP techniques) |
| Recommendations<br><br>*(offered by participants within each phase)* | • Other techniques other than written need to be promoted<br>• The questions asked during RP are more important than framework that contains them (i.e. suggesting a need to link the RP method to the intended purpose) | • More RP training/support is needed for supervisors and reviewers, in order to enable better support of others' RP and ensure consistency in supervising and reviewing<br>• More guidance and/or examples of RP are needed to help facilitate the supervision and reviewing process | • Extra facilitation suggested in the form of RP examples and templates.<br>• Even more interaction in the workshop to learn from others<br>• A follow up RP forum was suggested to provide a support mechanism post-workshop<br>• Timing of the workshop was highlighted as (e.g. it should be completed early in SE journey) |

# Chapter Six

# Study 3: An evaluation of peer-reviewed reflective practice research in sport (2013-2018): A contemporary update

### 6.1 Thesis Study Map

| Study | Objectives & Key Findings |
|---|---|
| Study One: Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport<br><br>(completed 2013; published 2014) | Objectives:<br>• To assimilate, analyse and present the reflective practice literature within the sport domain<br><br>Key Findings:<br>• Benefits of RP appear to be widely accepted<br>• A lack of understanding exists within the literature<br>• More evidence-based research is needed including (but not limited to) exploration of:<br>o the motivation, efficiency and effectiveness surrounding RP;<br>o the pedagogical approaches associated with 'how' one should or could use RP. |
| Study Two: Surveying the current landscape of reflective practice (2013-2015): Utility, learning and next steps<br><br>Phase 1: *Understanding the international landscape of RP in sport psychology education and development* (completed 2014)<br><br>Phase 2: *Supervising and reviewing the RP competency of BASES Supervised Experience (SE)*<br>(completed 2015)<br><br>Phase 3: *Delegate perceptions of a RP workshop: a summary of evaluation data* (completed 2016) | Objectives:<br>• To explore and summarise the international landscape of reflective practice in sport psychology<br>• To explore SES practitioners' views and experiences regarding the utility of reflective practice, including:<br>o Perceived value & understanding of RP (supervisors, reviewers and supervisees)<br>o Perceived confidence & competence of reviewers and supervisors judging RP<br>o Training obtained prior to role/s and training required<br>To summarise supervisee / delegate feedback and future recommendations based on 3 years delivery of RP workshop<br><br>Key Findings:<br>• A lack of understanding of RP was evident within sport psychology and SES practitioners which can impact RP engagement<br>• More specific training is required to facilitate and support others' RP engagement<br>• Certain traits and/or conditions are favoured for positive RP facilitation<br>• Both positive and negative outcomes were reported as a result of RP engagement |

| Study Three: An evaluation of peer-reviewed reflective practice research in sport (2013-2018): A contemporary update | **Objectives:**<br>• To assimilate, analyse and present the last six years of reflective practice literature within the sport domain |
|---|---|

### 6.2 Introduction

Chapter three reviewed the quantity and quality of RP research published within the sport domain between the years of 2001 and 2012 inclusive. Key findings included a UK dominance in publishing RP in sport literature, with sport psychology and sport coaching domains being the most prevalent disciplines reporting on the process. Additionally, the majority of research produced during this time period was qualitative in nature and therefore calls were made for more evidence or intervention-based studies. Conclusions of the published review (see chapter 3) which to date (July 2019) has received 3118 views and 29 citations (according to Google Scholar), also noted a potential lack of understanding surrounding RP as a process, evident in the removal of a large proportion of articles that did not meet the specified inclusion criteria. Outcomes were then used, formatively, in Chapter 4 whereby interviews with sport psychology practitioners and educators provided further context / depth on the conceptualisation and understanding of RP. Given that some six years has now passed, it was perceived timely to revisit the literature inspired by the same question as per Huntley et al. (2014). Key research questions to address included:

- *Has the literature developed since 2012, and if so, how?*
- *Has the rate of publication / interest in the subject grown in volume?*
- *Has the geographical location of publication changed?*
- *Have the outlets for publication changed?*
- *What research designs, techniques and methods are being utilised?*
- *Are there any changes to the sport-related professions/disciplines researching/delivering RP (by whom) and those participating in RP (for whom)?*
- *Has understanding of RP improved?*

Therefore, the aim of the present chapter is to present an updated, contemporary literature review, using the systematic review methods (as utilised in chapter 3) of RP literature within sport published between 2013 (1st January) and 2018 (31st December).

A literature search procedure akin to that observed in chapter three (pp. 63-65) was conducted, utilising the same search terms and criteria. From here, identified papers were categorised into country of origin (of the lead author), publication outlet, discipline, profession or community, research design and data collection techniques used, all using a combination of the classification procedures and definitions used by Mann et al. (2009), Culver et al. (2003, 2012) and Smith (2010) as outlined previously. In addition, the identified articles were also reviewed to explore key themes, as well as the techniques and methods of RP at the centre of the identified research sample.

### 6.3 The sample

The above described search initially yielded a total of 94 outputs, which included peer-reviewed journal articles (*n* = 68), non-peer reviewed (e.g., unpublished theses, conference proceedings) outputs (*n* = 4), and book chapters (*n* = 22). Once the non-peer reviewed outputs were removed, and each was separately assessed against the inclusion criteria (initially by the author and agreed and confirmed by members of the supervisor team) this created a final sample of 59 manuscripts. Compared to the sample in chapter three, where a total of 68 outputs were identified, the number of publications expressed as an average had almost doubled, increasing from 5.7 to 9.8 outputs per year.

### 6.4 Origination and dissemination: The 'where'?

Analysis of the geographical location of each publication (analysed by first author location only), revealed that Europe was the largest producer of RP research within sport, accounting for over 76% of the sample (*n* = 45). Of these, the UK was also still the largest single nation producing such research (*n* = 40), with others including the Netherlands (*n* = 3) and Norway (*n* = 2). North America accounted for just over 13% of the sample (*n* = 8), with outputs from both the US (*n* = 7) and Canada (*n* = 1), and Australasia (specifically New Zealand) producing two manuscripts within this timeframe. Previously unrepresented continents within the chapter three analysis were also included in the sample, with outputs originating from both Asian and African countries, specifically Singapore (*n* = 3) and South Africa (*n* = 1) respectively. Although some frequencies are similar or even identical when compared to the previous analysis (e.g., see table 6.1), the timeframe currently under investigation (2013-2018) is approximately half that of the previous analysis (2001-2012), and therefore increasing changes can be observed in the uptake in all regions.

Table 6.1. Changes in frequency of reflective practice publications per nation

| Nation | *2001-2012* *(n = 68)* | *2013-2018* *(n = 59)* |
|---|---|---|
| Africa | 0 | 1 |
| Asia | 0 | 3 |
| Australasia | 2 | 2 |
| Europe (other) | 4 | 5 |
| Europe (UK only) | 53 | 40 |
| North America | 8 | 8 |

The current sample was also explored in terms of dissemination outlet whereby, perhaps unsurprisingly, the *Reflective Practice* journal was found to be most frequently observed (*n* = 18) accounting for more than 30% of the outputs under scrutiny. Comparison across the two time periods (see table 6.2) revealed that the outputs in *Reflective Practice* had almost doubled compared to the previous analysis [where 25% (*n* = 17) of the overall sample (*n* = 68) was published here], increasing from an average of 1.4 sport specific outputs per year to three per year. Possible reasons for such growth include the increase in issues published per year (which has been 6 per year since 2011, compared to only 3 issues per year in 2000 to 2004, 4 issues per year in 2005 to 2008, and 5 issues per year in 2009 and 2010), as well as an increased requirement for evidence of RP within professional training courses therefore increased engagement and/or awareness.

Another evident change in the sample of literature is observed when comparing the specific publication outlets most frequently publishing RP research within the two review periods. Three out of the top four publishers (with regard to frequency) of RP research in sport between 2001 and 2012 were sport psychology specific, however, within this updated analysis, only one sport psychology specific journal now features (*The Sport Psychologist*) in that top four, which was also the most frequent producer of sports RP literature up to 2012. However, second to the multidisciplinary *Reflective Practice* journal, is now *Sport, Education and Society*, an outlet publishing five articles on RP since 2013. Previous calls have been made for more critical RP in the literature (e.g., Knowles & Gilbourne, 2010; Knowles et al., 2012) including clear conceptual links to critical theory and the work of Habermas, for example. Such theoretical underpinning, therefore, when engaging in (or writing about) critical RP can lend itself to more of a sociological influence, and consequently accepted discussion in such outlets (e.g., *Sport, Education and Society*), which may therefore account for some of the shifts in the outlets of RP research in this way.

Table 6.2. Changes in frequency of reflective practice publications per outlet

| Journal Outlet | *2013-2018 (n = 59)* | *2001-2012*[2] *(n = 68)* |
|---|---|---|
| Reflective Practice | 18 | 17 |
| Sport, Education & Society | 5 | -[3] |
| International Sport Coaching Journal | 5 | - |
| The Sport Psychologist | 4 | 18 |
| Sport & Exercise Psychology Review | 3 | 11 |
| Journal of Applied Sport Psychology | 2 | - |
| Journal of Sport Psychology in Action | 2 | - |
| Sports Coaching Review | 2 | 1 |
| Strength & Conditioning Journal | 2 | - |
| Asia-Pacific Journal of Health, Sport and Physical Education | 1 | - |
| Case Studies in Sport and Exercise Psychology | 1 | - |
| International Journal of Coaching Science | 1 | - |
| International Journal of Evidence-Based Coaching | 1 | - |
| International Journal of Sports Science & Coaching | 1 | 2 |
| Journal of Change Management | 1 | - |
| Journal of Hospitality, Leisure, Sport, Tourism & Education | 1 | 1 |
| Journal of Perspectives in Applied Academic Practice | 1 | - |
| Leisure | 1 | - |
| Journal of Outdoor and Environmental Education | 1 | - |
| Pastoral Care in Education | 1 | - |
| Psychology of Sport and Exercise | 1 | 4 |
| Qualitative Research in Sport, Exercise & Health | 1 | - |
| Social Behavior and Personality | 1 | - |
| Strategies | 1 | - |

However, in addition, the editor/s and reviewers of these articles (and those more broadly in the wider sample) have a role to play in the dissemination of such literature,

[2] *For full list of outlets for initial sample see chapter 3*
[3] *(-) denotes a new entry for 2013-2018*

and by way of tenure period changes to editorial boards that are likely to have taken place, which may have also influenced the scope and focus of the journals.

Other new outlets now publishing RP research within a sports context include the *International Sport Coaching Journal, Journal of Sport Psychology in Action*, *Journal of Applied Sport Psychology*, and *Strength and Conditioning Journal* (see table 6.2 for full comparative list).

### 6.5 Professions and communities: The 'by whom' and 'for whom'?

Between 2001 and 2012, sport psychology was the dominant discipline for publishing RP research (61.8%), followed by sports coaching (29.4%). However, within the new timeframe (2013-2018), this finding has reversed, whereby coaching now represents more than 52% (*n* = 31) of the overall sample, and sport psychology reducing to just over 32% (*n* = 19). Sport and exercise science remain the same in absolute terms (*n* = 2) but expressed as a percentage has reduced to 3.4% of the sample, and disciplines not previously featured in 2001-2012 now include strength and conditioning (*n* = 2), sports nutrition (*n* = 1) and performance analysis (*n* = 1).

Additional analysis was conducted to explore the communities of focus of these outputs. Similar trends were observed in that coaches (*n* = 28) were identified as the most frequently reported end user and/or participant within the reviewed studies, followed next by sport psychology practitioners (*n* = 14), and then athletes (*n* = 6) specifically. Of the studies that involved coaches, 20 were specifically UK-based (33.9%), and of these, 10 (16.9%) utilised coach education students within HE settings as the participants. Such increases in this domain could be linked to UK HEI's now further embracing RP in sports coaching curricula and thus pedagogical research using curriculum-based RP interventions / involvement have increased. Additionally, reflective skills are increasingly being recognised as graduate / employability skills and therefore featuring more frequently in sport-based degree courses such as coaching (e.g., Cronin & Lowes, 2016; Stoszkowski & Collins, 2014a/b). Such student-based populations as seen previously (e.g., Knowles et al., 2001, 2006; Carson, 2008), provide ample accessibility and afford generous samples sizes compared to sport-based populations which have limited access and/or number, but also suggest that RP skills are being developed earlier in sport practitioner education.

Various levels of practitioner expertise were also identified within the broader population groups (e.g., experts/experienced; neophyte; novice/trainee/student), as well as growth in some areas of expertise, which were less frequently observed. One example here resides in sport psychology where only one example of RP research within an experienced setting was observed, yet in the current sample, three empirical

studies (e.g., Cropley, Baldock, Mellalieu, Neil, Wagstaff, & Wadey, 2016; McDougall, Nesti, & Richardson, 2015; Uphill & Hemmings, 2017) were identified utilising experienced sport psychologists as a population. In addition, perhaps such findings mirror the temporal maturation of previously neophyte practitioners becoming more accepting and aware of the need for RP, alongside more calls for evidence-based research in this area (e.g., Huntley et al., 2014). Alternatively, it may also be that practitioners are becoming more confident and willing to share honest practice-based reflections, vulnerabilities, and anxieties, even when these may include more negative experiences, along with greater opportunities to publish case study or personal reflections as research. One example of this is by Uphill and Hemmings (2017) who argued that vulnerability within a sport psychology context, even in so-called expert/experienced practitioner settings is a somewhat taboo subject. Authors here use critical reflection, through short practice vignettes, to tackle what typically is silent and invisible, in order to shed light on the concept of vulnerability in applied sport psychology settings, whatever the level of expertise.

### 6.6 Research design and data collection techniques: The 'how'?

Qualitative research designs were by far the most prevalent in the research produced between 2001-2012 (88.2%), with others each classified as quantitative (*n* = 4) or mixed methods (*n* = 4). In the more recent timeframe (2013-2018), research was still predominantly qualitative in design (*n* = 48) accounting for more than 80% of the sample, whereas mixed methods RP research now accounted for over 15% (*n* = 9) of the sample, with two outputs purely adopting quantitative methodologies (*n* = 2). Within the qualitative outputs, eight (*n* = 8) papers were classified as discussion-, theory- or review-based papers and did not include participant data as such, and therefore were classified separately. The remaining qualitative papers (*n* = 40) were separated into those that were self-reflective or based on the author/s' practice or experience (e.g., recognising the author/s as participant/s), and those that involved participants external to the authorship team. Of the outputs that were self-reflective, autoethnographical or written narrative, the majority were those produced by multiple authors (*n* = 10), including seven from the discipline of psychology, as opposed to single author reflective papers (*n* = 4), where each output emanated from a different discipline (coaching, nutrition, sport science and psychology).

Of those papers involving data collection from participants outside of the authorship team, the most frequently utilised method was an interview-based approach (*n* = 9), focusing on a variety of population groups (e.g. coaches, athletes, psychologists) followed next by a multiple method approach (*n* = 8), which emanated

predominantly from the coaching domain. Finally, one paper uniquely employed a combined ethnography and participant interview approach within a sport psychology setting and thus is categorised individually (see Table 6.3).

Examining the RP methods utilised within each study (as opposed to the research methods *per se*) more closely, it is evident that a wide range of approaches have begun to appear in the literature. For example, the use of technology to assist RP has been explored by several authors, including using video to support RP (e.g., Mead, Spencer, & Kidman, 2016; Partington et al., 2015), online blogs (e.g., Stoszkowski & Collins, 2017; Stoszkowski, Collins, & Olsson, 2017), and *Think Aloud* (e.g., Whitehead, Cropley, Huntley, Miles, Quayle, & Knowles, 2016). Partington et al. (2015) explored the impact of video feedback on soccer coaches' reflections longitudinally over three seasons. Through interviews, authors found that the use of video technology and discussion opportunities facilitated coach reflection, specifically reporting increased self-awareness, and greater potential for more critical reflection. Still in a coaching context, Mead et al. (2016), also reported a positive perception to video reflection (which by definition was also verbal) by all participants ($n$ = 6), demonstrating a shift in the literature from more traditional techniques of RP. However, some barriers were identified within the latter study that did indeed prohibit the coaches from engaging in the video/verbal RP method over the existing written methods utilised, which included a lack of prioritisation (time), difficulty in administration of the technology, and the vulnerability that incurred when watching such self-reflection videos back, with the latter barrier in particular highlighting a need for skilled RP facilitation.

Shared online blogs ($n$ = 4) were also utilised within the current sample, which were deemed to increase collaboration and social interaction (as well as supporting the development of communities of practice (COPs) within student cohorts (Stoszkowski & Collins, 2017; Stoszkowski et al., 2017). Whilst this method was deemed useful in coach education / pedagogical settings by providing students with a 'space' for learning and critical reflection, as well as affording evidence of such from an educator's perspective, it is questionable how useful such shared blogs would be outside of this setting given that the motives for engagement (e.g., fulfilling assessment criteria) may not be apparent.

The current sample of literature also revealed increases in the volume of outputs focusing on in-event RP, something that was limited in the previous analysis (see chapter 3), where only one in-event paper was identified (e.g., Knowles et al. 2012). One recent example, which could arguably have utilised a more realistic in-event procedure adopted a *Think Aloud* (TA) protocol (Whitehead et al., 2016), which

authors suggested could be a method to help facilitate reflection-in-action not permitted by other more traditional forms of RP which rely on retrospective recall. Here, rugby coaches were instructed on how to use TA, before utilising the protocol in their practice (subjected to researcher observations) alongside receiving individual support. Follow-up social validation interviews with participants revealed that TA and the associated training, which included an RP workshop: (1) increased awareness; (2) enhanced communication; and (3) facilitated pedagogical change. Furthermore, authors reported that the participants (coaches) stipulated a desire for more RP support and facilitation. However, the exploration on any negative impact of TA on coaching practice (e.g., from an information processing perspective / overload / conflicting attentional foci) was overlooked and must be considered in future.

Table 6.3 Frequency of data collection methods utilised in publication sample

| Methodology | Data collection methods | Frequency *(n)* |
|---|---|---|
| Quantitative (*n* = 2) | e.g. Questionnaire and/or assessment of reflective levels | 2 |
| Mixed Methods (*n* = 9) | e.g. Journals/diaries, interviews, focus groups, systematic observations, questionnaires, performance measures, blogs | 9 |
| Qualitative (*n* = 48) | Discussion, theory or review papers (e.g. no participants) | 8 |
| | Reflective papers (e.g. reflective account, vignettes, autoethnography, narrative) | 14 |
| | - Multiple author | *10* |
| | - Single author | *4* |
| | Data collection from participants external to authorship team | 25 |
| | - Interviews (inc. focus groups) | *13* |
| | - Other- single method (e.g. journals, observations) | *4* |
| | - Other – multiple methods (e.g. diaries, interviews, focus groups, observations, field notes, reflections) | *8* |
| | Combined (internal and external methods | 1 |

Other examples of RP methods identified within the sample included journals or diaries (e.g., Fletcher & Wilson, 2013), reflective conversations (e.g., Peel, Cropley, Hanton, & Fleming, 2013), photography (e.g., Peel et al., 2013), r-cards (e.g., Koh, Chew, Kokkonen, & Chew, 2017), and poetry (e.g., Threlfall, 2013), either utilised in isolation or a combination of these methods, suggesting that whilst increases in technology to support or engage in RP has been observed, written, spoken or 'pen and paper' methods are still proving to be popular among such advances.

### 6.7 Outcomes of RP research / evidence: The what?

This section focuses on discussing the outcomes or evidence reported within the reviewed studies in relation to RP, which provides a more detail about our understanding of RP. Adopting a quantitative research design, Cowden and Meyer-Weitz (2016) explored relationships among self-awareness, resilience and stress within tennis players ($n$ = 333), using the SRIS and a cross sectional design, concluding that self-reflection was positively correlated with resilience. However, as with correlational data, causal relationships are not identifiable, and the study was based on self-report data. Nevertheless, one study that did utilise the SRIS along with another quantitative data collection method, was that of Kuklick et al. (2015b) who explored reflection in sport coaching students over 12 weeks, whereby levels of reflection were examined within weekly journal entries. No significant changes were identified over the 12-week period on all (self-report) subscales of the SRIS (need, engagement, insight), but significant increases were identified between pre- and post-level of reflection as identified using a rubric (Powell, 1989).

Analysis of student blog data also revealed that the depth of reflection increased over time (from descriptive towards critical), within a group of 26 coach education students (Stoszkowski & Collins, 2014a). Here, blogs were used as a mechanism to facilitate RP. Students were required to create and maintain a blog for 26 weeks during a taught sports coaching module as part of a formal assessment. Specifically, students were provided with Gilbert and Trudel's (2001) framework of experiential learning to guide their reflections, as well as basic training on how to start a blog. Fellow students were encouraged to comment and interact with individuals' blogs in addition to the module tutor. It was identified that more links to coaching theory were made in the latter stages of the data collection period, and lengths of blog entries increased over time, supporting such improvements in reflection. However, only 2.45% of all the blog posts over the entire student group were deemed as reaching a critical level, suggesting that some of the key underpinning features of critical reflection may not have been apparent either in the students (e.g., higher order

thinking, self-awareness) and / or the context (e.g., the constraints of assessment criteria or the stipulated written mode of reflection). Moreover, as iterated by Moon (2004), deep reflection can be limited by external factors such as word counts in written assessments or time constraints, both of which are relevant here.

Koh and colleagues (2015), also adopting a mixed methods design, explored levels of reflection in experienced coaches. Their findings suggested that level of reflection was dependent upon participants desire to engage with the RP process and the "worth they saw in the learning facilitator's recommendations to improve their athletes' technical and tactical development" (p. 273). However, only two coaches were involved and data regarding the impact on players was not considered. Koh et al. (2017) did, however, include both players and coaches in a study to test the effectiveness of *r-cards* for basketball performance, which players (and coaches) were educated on through a workshop delivered by a learning facilitator. Here, whilst quantitative performance data revealed no significant differences in players' performance post-intervention, qualitative analysis reported that the r-cards were perceived to improve team performance and preparations, as well as helping the players to set goals, identify weaknesses, and to recognise effort.

The impact of RP on athletic performance was also explored by Tan, Koh and Kokkonen (2016) where more declines than improvements were observed after a 5-week guided reflective diary intervention. However, in contrast, semi-structured interviews with the athletes revealed a more positive outlook to the intervention, suggesting it served as a reminder about previously set goals, as well as how to monitor, evaluate, reflect and action plan for future. Additionally, the reflective diaries helped the athletes to increase their 'feel' in shooting, and enhanced motivation. Whilst performance declines raise concern, it must be noted that changes were not subjected to statistical analysis and therefore significant findings were not reported (only mean individual differences). Additionally, contextual factors associated with each athlete were not considered, which could have undoubtedly impacted a single post-intervention performance indicator, rather than the reflective diary causing performance issues, especially given the positive qualitative responses offered. Alternatively, outside of sports coaching, Cropley et al. (2016) reported that RP also benefitted sport psychology consultants in their development of coping skills as indicated through semi-structured interviews, where reflection was described as the "critical link between the types of experience discussed previously, learning and the development of coping strategies" (p. 295).

### 6.8 Reflecting back on literature: What's changed?

Several developments appear to have taken place since the previous review (chapter four) beyond the obvious growth in RP literature within sport. Fewer studies were removed at the initial stage of the present research (37%) compared to those removed at the outset chapter four (62%). This could indeed indicate that RP as an focus has increased, as more articles met the initial inclusion criteria, such as providing a definition of RP, or RP being part of the process and/or outcome of the research paper, rather than simply including the term 'reflection' in the title. Several of the papers included in the present study (*n* = 8) had cited Huntley et al. (2014) where such issues around a lack of understanding were initially raised, and therefore may have positively contributed to this development.

What appeared to be a professional tool for and used by sport psychologists and coaches for externally driven qualifications, as indicated by the dominant outlets and professions pre-2012, the present findings show that RP has also become a tool also used for more personal development purposes. This is evident in the articles where RP is described as helpful in the development of coping strategies (e.g., Cropley et al., 2016) and used to share professional vulnerabilities (e.g., Uphill & Hemmings, 2017) both within experienced sport psychology practitioner settings.

A considerable increase in technology use to support RP is also evident within the present study compared to the previous review which included little if any such examples. This may be indicative that individuals are engaging in (or being introduced to) new modes of RP, which may in turn be more efficient ways of engaging in and evidencing the process, such as the use of blogs, videos and audio recordings. However, more research is needed to ascertain the utility and effectiveness of these modes in SES settings as they were only evidently used in coaching settings in the current study.

Finally, compared to the previous review, whilst qualitative research methods still dominate the respective literature pools, in the present and more recent literature review, more objective data is being presented as evidence, either in isolation (e.g., quantitative methods only) or with other qualitative methods (e.g., a mixed methods approach). This has resulted in new ways of understanding RP within sport settings emanating from differing underpinning philosophies compared to how RP has traditionally been investigated. Such a finding has demonstrated a paradigmatic shift which allows different types of research problems and questions to be explored.

### 6.9 Reflecting forwards: What next?

The present chapter has revealed interesting developments in the publication field of RP in sport. Such developments include an increase in volume of publications, changes (more breadth) to the publication outlets of such articles including 'new entries' (e.g., *Sport, Education and Society*), changes to the main sport disciplines publishing in RP, and more evidence of empirical research designs being utilised. Greater breadth in the population samples is also now observed (e.g., more expert practitioners). Whilst some 'new' disciplines and populations are observed (e.g., sports nutrition, performance analysis, strength and conditioning), outputs from 'sport and exercise science' as an umbrella discipline have fallen, with only one self-reflective article from such a practitioner produced since 2013. It therefore is argued that research is required to examine the RP development within sport and exercise populations, including students, trainee practitioners and neophytes/novices, as well as more broadly within a wider sport practitioner context. Specifically, more longitudinal evidence of RP development and engagement within these sport science populations would also add to the literature, given that most thus far emanate from a sports coaching setting.

# Chapter Seven

# Study 4: Exploring longitudinal reflective practice experiences of trainee Sport and Exercise Scientists engaged in BASES Supervised Experience

### 7.1 Thesis Study Map

| **Study** | **Objectives & Key Findings** |
|---|---|
| Study One: Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport<br><br>(completed 2013; published 2014) | Objectives:<br>• To assimilate, analyse and present the reflective practice literature within the sport domain<br><br>Key Findings:<br>• Benefits of RP appear to be widely accepted<br>• A lack of understanding exists within the literature<br>• More evidence-based research is needed including (but not limited to) exploration of:<br>  ○ the motivation, efficiency and effectiveness surrounding RP;<br>  ○ the pedagogical approaches associated with 'how' one should or could use RP. |
| Study Two: Surveying the current landscape of reflective practice (2013-2015): Utility, learning and next steps<br><br>Phase 1: *Understanding the international landscape of RP in sport psychology education and development* (completed 2014)<br><br>Phase 2: *Supervising and reviewing the RP competency of BASES Supervised Experience (SE)* (completed 2015)<br><br>Phase 3: *Delegate perceptions of a RP workshop: a summary of evaluation data* (completed 2016) | Objectives:<br>• To explore and summarise the international landscape of reflective practice in sport psychology<br>• To explore SES practitioners' views and experiences regarding the utility of reflective practice, including:<br>  ○ Perceived value & understanding of RP (supervisors, reviewers and supervisees)<br>  ○ Perceived confidence & competence of reviewers and supervisors judging RP<br>  ○ Training obtained prior to role/s and training required<br>• To summarise supervisee / delegate feedback and future recommendations based on 3 years delivery of RP workshop<br><br>Key Findings:<br>• A lack of understanding of RP was evident within sport psychology and SES practitioners which can impact RP engagement<br>• More specific training is required to facilitate and support others' RP engagement<br>• Certain traits and/or conditions are favoured for positive RP facilitation<br>• Both positive and negative outcomes were reported as a result of RP engagement |

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| Study Three: An evaluation of peer-reviewed reflective practice research in sport (2013-2018): A contemporary update<br>(completed 2019) | Objectives:<br>• To assimilate, analyse and present the last six years of reflective practice literature within the sport domain<br><br>Key findings:<br>• Increased variation in publication outlet and first author location<br>• New dominance of RP research within sport coaching, but new journal outlets were also evident<br>• Qualitative methods still dominated the sample, but more quantitative and mixed methods were included here |
| **Study Four: Exploring longitudinal reflective practice experiences of trainee Sport and Exercise Scientists engaged in BASES Supervised Experience** | **Objectives:**<br>• To explore trainee Sport and Exercise Scientists' development of engagement in RP over time. |

### 7.2 Introduction

As a regulatory body, BASES require Sport and Exercise Scientists applying for accreditation in their discipline areas (e.g., physiology, biomechanics, psychology) to "understand the value of reflection on practice and evidence engagement in the process" (BASES Accreditation Competency Profile, 2016, p. 8). To demonstrate this, practitioners are expected to provide evidence of reflective accounts maintained throughout the supervised experience (SE) period (e.g., between two and six years) and/or those corresponding to practice and case study (see https://www.bases.org.uk/spage-professional_development-supervised_experience.html).

Previous research, within disciplines outside of sport such as nursing and education, have investigated the development of reflective skills over time. For example, Smith and Trede (2013) explored RP experiences over a two-year period in twelve physiotherapy students and the transition into graduate roles. Participants were interviewed upon completion of a specific RP module as a student and then again approximately six months into a physio appointment as a graduate. Findings revealed that RP as a graduate was very different to that encouraged or taught as a student therefore indicating a perceived change over time, where more dialogic methods were utilised, and the context was more appreciated. Pai (2015) reported increases in nursing students' self-reflection (using the Self-Reflection and Insight Scale; SRIS) and clinical competence (using the Holistic Nursing Competence Scale;

HNCS) and decreases practice stress (using the Perceived Stress Scale; PSS) during clinical practicum using longitudinal questionnaire data collected at two, four and six months after clinical practice. More recently McLean and Price (2018) reported longitudinal developments in reasoning and interpretation within novice academic teachers, through analysis of iterative reflective writing completed within module assessments over two years. Such research has added to the understanding of the development of RP over time, where studies have utilised varied timeframes, participant sample sizes, and reflective techniques (e.g., written). Most longitudinal research to date has also utilised single-design research methods (e.g., Findlay, Dempsey & Warren-Forward, 2010; Liimatainen, Poskiparta, Karhila & Sjögren, 2001). In addition, whilst some sport-specific literature has begun to consider longitudinal approaches to studying RP, this has mainly been in a sport coaching context (e.g., Knowles et al., 2001, 2006; Kuklick et al., 2015a, 2015b; Partington et al., 2015) and no research to date has explored how trainee practitioners' reflective skills develop over time whilst engaged in a period of professional accredited training (e.g., BASES SE) specifically within a Sport and Exercise Science context. Additionally, it is still unclear as to how RP could be best developed for those embarking on such experiential training programmes. Current BASES SE guidelines simply stipulate that in order to achieve BASES accredited status, amongst other competencies, trainee practitioners must provide evidence of RP engagement, as well as attend a compulsory BASES RP workshop at some point within their SE. Engagement in the RP process is facilitated by the respective BASES supervisor and subsequently, an allocated BASES reviewer judges whether sufficient engagement has been demonstrated. Indeed, whilst recommendations have been made regarding how reflective practice might be taught (e.g., Russell, 2005; Smith & Trede, 2013), there is little consensus on these processes (e.g., *how* RP should be evidenced, or *what* methods should be utilised) and their resultant efficacy within such professional development programs.

Furthermore, whilst the present research has provided some exploration and detail about individual engagement in RP, this has either been retrospective or indeed from the perspective of a supervisor or mentor (Ch.5). The aim of this study was, therefore, to explore trainee Sport and Exercise Scientists' development of RP (e.g., reflective thinking and learning) over time. Specifically, the study aimed to examine the RP of trainee practitioners prior to their engagement in a compulsory BASES RP training workshop. Following this, the study aimed to understand the impact of this workshop on practitioners' engagement in reflection, as well as how their RP developed over the BASES SE programme. In attending to these aims, it was hoped

that such exploration over a longitudinal period would plot the developmental journeys of trainee practitioners with respect to RP to inform future pedagogical approaches to educating and supporting RP within sport and exercise science settings.

## 7.3 Method

### *7.3.1 Mixed Methods Research Design*

A convergent parallel mixed methods design was adopted, which involved separate collection and analysis of quantitative and qualitative data focused on the phenomenon of RP and the experiences of practitioners. Quantitative data was obtained using validated questionnaires and written reflections (assessed for levelness) with trainee practitioners (see section 6.3.3). Qualitative data was collected through semi-structured interviews. Subsequently, the data generated were merged, compared, and interpreted cohesively, with the aim to illuminate the quantitative results by means of qualitative data (Creswell & Plano Clark, 2018; Anguera, Camerino & Castañer, 2012).

### *7.3.2 Sampling Procedure / Recruitment and Participants*

Ethical approval for the research study was obtained from Liverpool John Moores University Ethics Committee. BASES, acting as a gatekeeper, provided informed consent for the research project to proceed and supported the recruitment of potential participants, which in this case were BASES probationary Sport and Exercise Scientists (e.g., those undergoing SE). Recruitment procedures included the following: BASES (the gatekeeper) sent an email about the research project to new BASES SE registrants who were about to undertake a core BASES registration workshop; the lead researcher attended a BASES registration workshop to present an overview of the research project to delegates, ascertain participant interest and intentions to attend future BASES RP workshops during BASES SE to aid planning; the lead researcher also attended three BASES RP workshops in person to further disseminate information about the research project given that not all attendees would have received the above information (e.g., those who had been registered on BASES SE for longer periods but were still yet to complete the BASES RP workshop). Potential participants were all informed both verbally and in writing of the predicted longitudinal commitment required for the study at the outset (see Fig. 6.1). The initial sample consisted of 30 participants who were recruited across the three workshops (workshop 1, $n$ = 16; workshop 2, $n$ = 4; workshop 3, $n$ = 10). This resulted in three cohorts of participants each with a different start point to data collection. All

participants provided written informed consent. Pseudonyms were used to ensure participant anonymity throughout the study.

Table 7.1 highlights the nature of the participant engagement with the data collection methods utilised throughout the longitudinal period. Missing data was attributed to dropping out of the overall project (e.g., Rachel, Katherine, Gary, Samuel, William) or in some cases because BASES SE had been completed (e.g., Peter, Laura, Julie, Jake). Other instances of more intermittent non-engagement were observed in some participants, which was further explored in the semi-structured interviews (when those were indeed completed). Participant sample sizes at each stage between T6-T24 (based on at least partial engagement) were: T6: *n* = 17; T12: *n* = 13; T18: *n* = 12; T24: *n* = 6).

Table 7.1. Participant engagement in each research element from T6 to T24 (Q: questionnaires; I: semi-structured interview; R: written reflection provided)

| | **Data Collection** | **T6** | | | **T12** | | | **T18** | | | **T24** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **(Time/ Method)** | **Q** | **I** | **R** | **Q** | **I** | **R** | **Q** | **I** | **R** | **Q** | **I** | **R** |
| 0 | Peter | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 1 | Eddie | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2 | Craig | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 6 | Katya | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 7 | Esther | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 8 | Jenna | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 9 | Laura | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 10 | Julie | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 12 | Gary | ✓ | ✓ | | | | | | | | | | |
| 13 | William | ✓ | ✓ | | | | | | | | | | |
| 14 | Jimmy | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15 | Samuel | ✓ | ✓ | | | | | | | | | | |
| 19 | Shane | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | |
| 20 | Jake | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 21 | Rachel | ✓ | ✓ | ✓ | | | | | | | | | |
| 22 | Charlie | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 24 | Katherine | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |

### *7.3.3 Data Collection Methods*

*7.3.3.1 Questionnaire of Reflective Thinking (QRT).*

The QRT developed by Kember et al. (2000) was designed to "examine the extent to which students engage in reflective thinking in professional preparation courses" (p. 392). The scale contains 16 items descriptive of the four types of reflective thinking advocated by Mezirow (1977, 1991): (1) habitual action; (2) understanding; (3) reflection; and (4) critical reflection. The items are scored on a five-

point scale from definitely agree to definitely disagree. For individual items see questionnaire in Appendix 5. Kember et al. (2000) reported reliability estimates ranging from .62 to .76 for the four subscales of the QRT, which according to Hair, Black, Babin and Anderson (2014) is classed as acceptable. In addition, Lethbridge, Andrusyszyn, Iwasiw, Laschingerm and Fernando (2013) provided evidence of both discriminant and convergent validity when assessing the psychometric properties of the QRT. In the present study, the scale was adapted by the researcher (similarly observed in Tricio, Woolford & Escudier, 2014) to make the wording applicable to trainee (BASES probationary) Sport and Exercise Scientists. For example, on the baseline version (T0), "my previous education and training to date" was substituted for "this course" on the original, and "educator" was substituted for "lecturer" to improve applicability for the participants. Reflective thinking (RT) using the QRT was assessed at baseline (prior to integration of the reflective activities; T0) and at 6 months intervals thereafter (T6, T12, T18, T24). Questionnaires administered after the workshop were framed to consider BASES SE (see appendix 7 for adapted versions).

*7.3.3.2 Reflection-in-Learning Scale (RLS).*

The RLS, developed by Sobral (2005), contains 15 items designed to measure *reflective learning* (RL). The first 14 items are scored on a seven-point Likert scale (1 = never, and 7 = always) and then totalled to provide an overall value of between 14 and 98 to provide an index of reflective learning, where low RLS scores are indicative of shortcomings in broad or deep reflective learning. Reliability analysis revealed good internal consistency over time (e.g. start: $\alpha$ = 0.84; end: $\alpha$ = 0.86), and significant positive relationships were found with other learning scales therefore indicating construct validity (e.g., Kalk, Luik, Taimalu, & Täht, 2014). An additional question (question 15) is used to provide an indication of skill or efficacy to practice the reflective process and adopts a 4-part nominal scale of restricted, partial, ample or maximal (each coupled with a further explanation) (see appendix 6).

*7.3.3.3 Confidence and Competence Rating Scales.*

Perceptions of confidence and competence relating to RP were also ascertained using a simple Likert scale of 0-10 (0 = not at all; 10 = extremely) in response to the following questions: (a) *Please rate how **confident** you feel in your ability to use reflective practice right now*; and (b) *Please rate how **competent** you feel in your ability to use reflective practice right now*. Previous research has revealed statistical similarity between detailed validated measures of self-efficacy and an

equivalent single item Likert scale response, which is suggested to be an acceptable alternative method of measurement (Maurer & Pierce, 1998). Previous research in sport settings (e.g., Cropley et al., 2012) has suggested that a lack of confidence could be associated with reduced RP engagement, therefore given the longitudinal nature of the study, it was deemed important to monitor this.

Perceived competence refers to a feeling that one can achieve a desired outcome and is a critical need for learners (Haslem, Wilkinson, Prusak, Christensen, & Pennington, 2016). Low levels of perceived competence naturally have a negative impact on individuals and are associated with low motivation, anxiety and depression (Tafarodi & Swann, 2001). Higher levels of perceived competence are positively associated with increased confidence and motivation (Clanton, Gardner, Cheung, Mellert, Evancho-Chapman, & George, 2014). Direct measurement of practitioner competence requires considerable resources and therefore indirect measures offer an alternative approach. Although specific questionnaires exist to assess perceived competence in specific settings (e.g. the Nutrition Competence questionnaire; Ball & Leveritt, 2015), no validated measures were available that were related to the current trainee practitioner context. In addition, given the longitudinal nature of the study and the repeated / multiple data collection demands upon participants, a single item Likert scale was utilised as seen elsewhere (e.g. Dehmer, Amos, Farrell, Meyer, Newton, & Meyers, 2013).

*7.3.3.4 Semi-structured interviews.*

The questions used within the baseline semi-structured interview (T6) were constructed based on the findings within two previous studies and further refined by the research team (e.g., lead researcher and supervisors). For example, a lack of understanding of RP was highlighted to exist based on the findings of chapter three and four, which was followed up in the semi-structured interviews of the present study by asking participants what they understood RP to be (accounting for both pre and post BASES RP workshop perspectives). Follow up and probing questions were included where the lead researcher felt appropriate. An example of this baseline interview schedule can be found in appendix 9.

Beyond the first interview with each participant at the 6-month stage (T6), the subsequent interviews (T12, T18, T24) adopted a different schedule. Here, each participant was firstly asked a set list of questions appropriate for exploring follow-up experiences subsequent to those discussed at T6. Subsequently, they were also asked individual questions relevant only to their own experiences as per the T6 / baseline interview schedule transcript. Still following a semi-structured procedure, this

approach was thought to offer a bespoke approach in attempting to understand the individuals' experiences of the process being explored over a longitudinal period. An example of a follow-up interview schedule can be found in appendix 10.

*7.3.3.5 Written reflections.*

Participants were asked to provide an example of a written reflection at each 6-month interval (T6, T12, T18, T24) to be sent to the lead researcher via email. Each participant was instructed that submitted reflections should be akin of the typical type of reflection they were completing at that stage of their reflective journey and submitting for BASES SE, where present guidelines currently request evidence of RP engagement. In the BASES RP workshop (see appendix 4) which was attended by all participants prior to submitting RP examples, more detailed information about the different techniques and frameworks of RP were discussed. Similar methods have been previously used in other studies (e.g., Knowles et al., 2001).

### *7.3.4 Procedures*

A summary of the research design and data collection procedures can be seen in figure 7.1. Written informed consent was sought prior to any data collection, and participants informed of their rights (e.g., confidentiality, anonymity, right to withdraw).

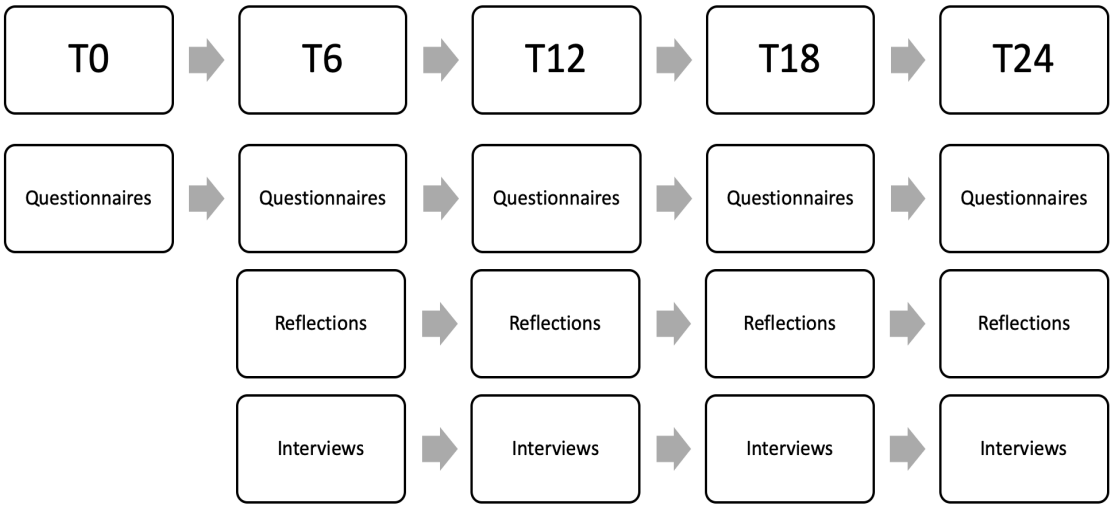


Figure 7.1 Summary of research design and data collection methods over longitudinal timeframe (T0 = baseline/pre-workshop; T6 = 6-months post workshop; T12 = 12- months post workshop; T18 = 18-months post workshop; T24 = 24-months post workshop)

*7.3.4.1 Baseline procedures (T0).*

Immediately prior to commencing the BASES RP workshop, participants were provided with a participant booklet (hard copy) containing a demographic information sheet for completion, the RLS, the QRT, and confidence and competence scales (appendix 11). The questions and scales were completed by hand, with the lead researcher present and available to answer any questions about the study.

*7.3.4.2 Follow-up procedures (T6-T24).*

Participants were required to repeat the completion of the initial baseline measures at six-month intervals throughout their remaining period of BASES SE. The subsequent questionnaire-based data collection was completed online using Bristol Online Survey (BOS) and thus in the participants' own time at a point of convenience. A week prior to each follow-up data collection point (T6-T24), participants were emailed a hyperlink to access the respective questionnaires and scales (e.g., QRT, RLS, confidence and competence scales) located on the BOS system.

Participants were also asked to provide an example of a written reflection at each 6-month interval (T6-T24) to be sent to the lead researcher via email representing the type of reflection they were currently engaged in completing at that stage of their reflective journey and submitting for BASES SE. As a further incentive, to maintain engagement with the longitudinal research process, feedback on individual reflections was offered by the lead author, by providing comments, reflective questions and suggestions/prompts using the track changes/comments functions on Microsoft word of how to possibly develop one's reflection further. Similar practices have been observed in Knowles et al (2012), which aimed to facilitate a process of (or movement towards) critical reflection by offering ongoing comments on the reflective accounts provided by an experienced sport psychology practitioner, which included suggestions for further personal and professional development.

In addition, participants were asked to take part in a semi-structured interview at T6, T12, T18 and T24. All interviews were conducted via Skype or telephone at a mutually convenient time and in a confidential setting. With permission, all interviews ($n$ = 48) were audio recorded using a Dictaphone and on average lasted 46 minutes. All interviews were transcribed verbatim and sent to each participant for accuracy checking and to provide consent on interpretation. Participants were also verbally reminded at the end of each interview to complete the corresponding online measures via BOS and to send across their example reflections.

### *7.3.5 Quantitative Data Analysis*

*7.3.5.1. Reflective thinking, reflective learning, confidence and competence (self-report reflective variables) at baseline (T0).*

All quantitative data was input into IBM SPSS Statistics Version 24 (IBM Corporation, New York) and statistical significance was set *apriori* at $p \leq 0.05$. Baseline data obtained at T0 were subject to exploratory data analysis (EDA) to ensure the most appropriate statistical tests were adopted and did not violate the respective assumptions. Data for each dependent variable (e.g., reflective thinking (QRT), reflective learning (RLS), confidence, competence) were assessed for internal consistency and reliability using Cronbach Alpha. Descriptive statistics (e.g., means, standard deviations, skewness and kurtosis) were obtained for the overall sample. Pairwise correlations were then utilised to explore relationships between all variables, (reflective thinking, reflective learning, confidence, and competence). Finally, multiple regression analysis was conducted to explore the ability to predict confidence and competence to reflect using the QRT and RLS measures as independent variables.

*7.3.5.2. Self-report reflective variables throughout BASES SE (T0-T24).*

Reflective thinking (QRT), reflective learning (RLS), confidence and competence were also analysed longitudinally across data collection points (e.g., T0, T6, T12, T18, T24). Descriptive statistics (mean and SEs) were obtained for each variable. Exploratory data analysis was initially carried out to assess the assumptions of the linear mixed model (LMM), with none of the current variables violating these assumptions. Whilst repeated measures ANOVAs are perhaps the natural choice for longitudinal or repeated measures experimental designs within sport and exercise science research, a fundamental issue arises when inconsistent samples or missing data come into play due to high experimental mortality or participant withdrawal when listwise deletions occur on SPSS (McCulloch, 2005; Quinn & Keough, 2002). Many applied experimental designs already have small and unequal sample sizes, therefore simply deleting the participant data from incomplete datasets is difficult to justify (Clark, Shoaib, Hewitt, Stanford, & Bate, 2012). The LMM can overcome limitations in applied research such as unequal sample sizes in repeated measures designs. For such reasons the LMM is emerging as a method of choice for conducting longitudinal, epidemiological and clinical research, where it is common to have missing data (Brown & Prescott, 2006; Fitzmaurice, Laird & Ware, 2004; Gurka & Edwards, 2011; Kutner, Nachtsheim, Neter, & Li, 2005; Vittinghoff, Shiboski, Glidden, & McCulloch, 2005). All models began as a null (i.e. without bias/all data inputted)

and were progressed to more complex parsimonious hierarchical models (i.e. data which did not contribute to the model were removed). A basic variance components model was constructed to calculate the intraclass correlation (ICC) of the random factor of participant to determine any significant variance to the dependant variables (Table 7.5). Wald Z statistics were utilised to test the null hypothesis that the population variance is zero, which if rejected, the proposed random factors were included in subsequent larger models. The covariance structure of the random factors was set to variance components in all models. Model fit was assessed using Akaike's information criterion (AIC). AIC revealed the model that best fit the variables of confidence, competence, reflective learning (RLS total), and the reflection subscale of the QRT was the first order auto-regressive (AR-1) repeated covariance structure for the repeated measures of time. However, for the *habitual action*, *understanding* and *critical reflection* subscales of the QRT, the best fitting model according to AIC was the diagonal repeated covariance structure for the repeated measures of time. All models estimated parameters using the maximum likelihood method. Where appropriate, LSD adjusted post hoc analyses were calculated and the inclusion of 95% confidence intervals (CI) of the differences were reported. All statistical procedures were carried out using IBM SPSS Statistics (Version 24, Chicago, IL, USA), with two-tailed significance being accepted at $p < 0.05$. All data is presented as mean ± SE unless otherwise stated.

*7.3.5.3. Level of reflection throughout BASES SE (T6-T24).*

In order to provide a judgement of each submitted written reflection, a framework, previously utilised in Knowles et al.'s (2001) study, was adopted. The framework, an adaptation of frameworks presented by Mezirow (1981), Goodman (1984) and Powell (1989), depicted six reflective levels: 1a: reflectivity; 1b: affective reflectivity; 2: reflection to reach given objectives; 3a: reflection on the relationships between principles and practice; 3b: wider reflection; 4: critical reflection (see appendix 12 for descriptions). After assessing inter-rater reliability/consensus of this framework on a random sample of the current participants' written reflections ($n = 5$) with two other experienced researchers in this area, the lead researcher recognised some possible amendments to be made given some discrepancies identified between individual raters. For example, one issue of contention was that to reach the highest level of reflection (critical reflection) using Knowles et al.'s (2001) framework, the participants (student coaches) had to attain the previous level of 'reflecting with others' (3b). This may have been possible in the context of the Knowles et al. (2001) study (a formal education setting and linked to assessment of reflection), however, in

a practicum context such as BASES SE where trainee practitioners are often working in isolation for the majority of their applied practicum hours, this would limit a trainees' ability to demonstrate a critical level of reflection as an individual. Whilst reflecting with others may be encouraged as a trainee who may lack knowledge and/or experience, once accredited (or more experienced), Knowles et al.'s (2001) criteria would not allow an experienced *critical reflector* to be rated as such without engaging with others (e.g., a critical friend).

Knowles et al.'s (2001) framework was further adapted by Cropley (2009) for use within a sport psychology practitioner context, where amendments to the descriptions were made as well as additional levels included, which then equated to 7 levels: 1: reflectivity; 2a: affective reflectivity (consultant); 2b: affective reflectivity (client); 3: discriminant reflectivity; 4: conceptual reflectivity; 5: theoretical reflectivity; 6: critical reflection (see appendix 13). For the purpose of the present study, Cropley's (2009) framework was adapted once again for the participants in question (e.g., trainee sport and exercise scientists), which included more applicable wording and terminology (e.g., consultant was changed to practitioner). In addition, levels 2a and 2b were amalgamated back to 2: affective reflectivity (which could include awareness of either own or client's feelings, or both). Technical reflectivity was added, originally described as "reflection to reach given objectives" (or level 2) by Knowles et al. (2001) and was deemed important given the practical nature of the SES disciplines. Finally, the last two levels depicted by Cropley (2009) were theoretical reflectivity and critical reflection, which are both arguably critical in nature. Therefore, *both* of these levels (5 and 6 in Cropley, 2009) were labelled as *critical reflection* in the current adapted version. Although the actual frameworks explained here do not have specific reliability data to support, research has shown that such frameworks (or rubrics) are able to reliably assess 'performance' (Hafner & Hafner, 2003) and have been used elsewhere to specifically assess reflective levelness (Kuklick et al., 2015a, 2015b).

Levelness of written reflections used the aforementioned adapted version, referred to from here as "Assessment of Reflective Level" (see appendix 14). As a research team, all members scored a sample ($n$ = 5), discussed the scores that were agreed and those that were not, before agreeing on a final score. Following this, I as the principal researcher scored the remainder independently using the collective discussions to guide my assessment (Patton, 2002). Quantitative data analysis continued from this point, where levels of reflection across the four timepoints (T6-T24) were subjected to LMM (see section 6.2.5.2 above) to explore main effects for time. AIC revealed that the model of best fit was AR-1.

### *7.3.6 Qualitative data analysis*

Semi-structured interviews were used to complement the use of quantitative measures by allowing the researcher to explore participants' views, feelings and experiences in greater depth. That is, the strengths associated with each of the particular methods were combined to help explore backgrounds and experiences of each delegate in more detail than would be possible simply with the use of a single method. NVivo 12.0 was used to collate and handle all interview transcripts. The analysis consisted of a combination of inductive and deductive techniques (Braun & Clarke, 2006). Deductive analysis focused on, for example, the questions about strengths and limitations of the attended RP workshop, or the perceptual changes over time (e.g. pre and post workshop attendance). As a semi-structured interview format was used to generate the data, the interview questions formed the basis of some initial data themes. However, a subsequent inductive process of analysis also allowed for the creation and identification of additional themes based on participants' responses which were then explored over the course of the analysis. Analysis did not take place until all transcripts had been collected and transcribed to allow participants' experiences to shape the data analysis process. For a full and detailed explanation of the thematic analysis process adopted, refer to section 5.3.1.4 (page 81).

## 7.4 Results

### *7.4.1 Introduction*

The following section firstly outlines the quantitative results, with a specific focus on the change over time identified within the measured variables (e.g., reflective thinking, reflective learning, perceived confidence, perceived competence, level of RP). In addition, this section also summarises the qualitative findings from the longitudinal interviews conducted throughout the data collection period. Table 7.2 provides an overview of the participant characteristics at the baseline data collection point (T0).

Table 7.2 Participant characteristics of baseline sample (T0) pre-BASES RP workshop attendance.

| Participant characteristics | | Survey respondents at T0 (*n* = 30) |
|---|---|---|
| Gender | Male | 18 |
| | Female | 12 |
| BASES registration (year) | 2011 | 1 |
| | 2013 | 4 |
| | 2014 | 10 |
| | 2015 | 8 |
| Attendance at RP workshop | 2015a (Feb 15) | 16 |
| | 2015b (Jun 15) | 4 |
| | 2016 (Feb 16) | 10 |
| Discipline | Psychology | 12 |
| | Physiology | 13 |
| | Other | 5 |
| Type of accreditation working towards | Support | 27 |
| | Research | 1 |
| | Both | 2 |
| Current status | Student (FT) | 9 |
| | Student (PT) | 2 |
| | Employment (FT) | 7 |
| | Employment (PT) | 6 |
| | Self-employed | 3 |

### *7.4.2 Quantitative results*

*7.4.2.1 Descriptive statistics (T0).*

Prior to conducting the main analyses, the data obtained were screened for normality. Skewness values at T0 ranged from -1.145 to .366 and kurtosis values ranged from -.903 to 3.001, indicating reasonable normality (Tabachnick & Fidell, 2013). Table 7.3 presents the means, standard deviations, scale ranges, and correlations for all reflective variables immediately prior to engaging in the BASES RP workshop. In addition, reliability coefficients are provided for overall RLS score, and each of the QRT subscales. The RLS score mean (±SD) was 64 (±9) whereas the QRT subscale data at T0 was 14 (±3) for habitual action, 17 (±2) for understanding, 17 (±2) for reflection and 17 (±2) for critical reflection. The mean (±SD) scores for confidence and competence were 6 (±2) and 5 (±2) respectively immediately prior to the RP workshop delivery, and were both significantly and positively correlated with RLS ($r$ = .70), QRT-U ($r$ range = .37 to .41), QRT-R ($r$ range .65 to .67), as well as

each other (*r* = .90). Correlations revealed that the RLS scale was also positively related to the QRT scale, but only significantly with the *understanding* (*r* =. 43) and *reflection* (*r* = .64) subscales of the measure.

Standard multiple regression (See Table 7.4) was used to assess the ability of two measures (RLS total score and each of the subscales of the QRT: habitual action, understanding, reflection and critical reflection) to predict perceived levels of confidence and competence to use RP. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The variance explained by the model as a whole in predicting *confidence* was 58.8% (*F* (5, 24) = 6.85, *p* < .001). The *reflection* subscale of the QRT made the largest unique contribution to perceived confidence (β = .42, *p* = .039), uniquely explaining 8.2% of the variance in confidence to reflect. The variance explained by the model as a whole in predicting perceived competence was 60.5% (*F* (5, 24) = 7.35, *p* < .001). The *reflection* subscale of the QRT made the largest unique contribution to perceived competence (β = .45, *p* = .023), uniquely explaining 9.6% of the variance in competence to reflect.

Table 7.3 Summary of intercorrelations, scale ranges, means, standard deviations and reliability estimates at T0

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. RLS | - | | | | | | |
| 2. QRT-HA | .36 | - | | | | | |
| 3. QRT-U | .43* | -.10 | - | | | | |
| 4. QRT-R | .64** | .15 | .14 | - | | | |
| 5. QRT-CR | .32 | .16 | .16 | .46* | - | | |
| 6. Confidence | .70** | .17 | .37* | .67** | .34 | - | |
| 7. Competence | .70** | .26 | .41* | .65** | .28 | .90** | - |
| Scale range | 1-7 | 1-5 | 1-5 | 1-5 | 1-5 | 0-10 | 0-10 |
| Mean | 64 | 13.67 | 17.10 | 16.57 | 16.93 | 5.50 | 5.27 |
| Standard deviation | 0.66 | 2.91 | 1.85 | 2.33 | 2.23 | 1.94 | 1.93 |
| Cronbach's alpha | .78 | .60 | .33 | .65 | .71 | - | - |

*$p$ < .05. **$p$ < .01.

Table 7.4 Self-report reflective learning and thinking as predictors of perceived confidence and competence to reflect at T0 (pre-workshop).

| Predictor Variables | Confidence β (CI) | Competence β (CI) |
|---|---|---|
| RLS Total | .373 (-.201, 2.389) | .283 (-.433, 2.083) |
| QRT – HA | -.005 (-.211, .204) | .132 (-.114, .289) |
| QRT – U | .155 (-.180, .507) | .251 (-.072, .596) |
| QRT – R | .416* (.019, .675) | .452* (.055, .693) |
| QRT – CR | -.017 (-.285, .255) | -.083 (-.334, .190) |
| $R^2$ | .588 | .605 |
| *F* | 6.85** | 7.35** |

β = standardised regression coefficient; CI = 95% confidence interval.
*$p$ < .05. **$p$ < .001.

*7.4.1.2. Longitudinal changes over time in self-report reflective variables (T0 - T24).*

LMM was used to explore change over time for each of the dependant variables measured throughout the SE period from T0 to T24. Table 7.5 depicts the ICC's (%) of the random factor (participant) accounted for in the LMM. As identified in Table 7.6, the LMM identified a significant main effect for time for measures of confidence ($F$ (4, 32.157) = 12.11, $p$ < 0.001), competence ($F$ (4, 32.333) = 7.476, $p$ < 0.001), RLS Total ($F$ (4, 33.116) = 3.621, $p$ = 0.015), and QRT habitual action ($F$ (4, 10.664) = 3.830, $p$ = 0.036). There were not, however, any significant main effects for time observed for QRT understanding ($F$ (4, 18.515) = 0.786, $p$ = 0.549), QRT reflection ($F$ (4, 22.975) = 2.729, $p$ = 0.54), or for QRT critical reflection ($F$ (4, 13.317) = 1.313, $p$ = 0.315).

Table 7.5. The ICC's (%) of participant as a random factor considering all of the dependant variables.

| Measures | ICC (%) | *F* | *df* | *p* |
|---|---|---|---|---|
| Confidence | 40.2* | 12.11 | 4, 32.157 | <.001 |
| Competence | 39.0* | 7.476 | 4, 32.333 | <.001 |
| RLS Total | 37.9* | 3.621 | 4, 33.116 | .015 |
| QRT – HA | 16.5* | 3.830 | 4, 10.664 | .036 |
| QRT – U | 7.6 | 0.786 | 4, 18.515 | .549 |
| QRT – R | 2.0 | 2.729 | 4, 22.975 | .54 |
| QRT – CR | 27.0 | 1.313 | 4, 13.317 | .315 |
| RP level | 54.1 | 1.691 | 3, 11.449 | .224 |

*Note:* *Represents significant determinant of variance within the linear mixed model ($p$ < 0.05).

*7.4.2.2 Changes in researcher-rated written reflective levels over time (T6-T24).*

The level that participants reflected at was explored between T6 and T24 using an adapted framework named "Assessment of Reflective Level" (see section 7.3.5.3 and appendix 14) and also subjected to LMM. However, as observed in table 7.7, the LMM did not identify a significant main effect for time on RP level ($F$ (3, 11.449) = 1.691, $p$ = 0.224).

Table 7.6 Means, standard errors and 95% confidence intervals for self-report RP variables over time

| | Baseline (*n* = 30) | 6 months (*n* = 16) | 12 months (*n* = 13) | 18 months (*n* = 11) | 24 months (*n* = 5) | *p*-value |
|---|---|---|---|---|---|---|
| Confidence[1] | 6 ± 0 (CI = 5 to 6) | 7 ± 0 (CI = 6 to 8)[a] | 8 ± 0 (CI = 7 to 8)[ab] | 8 ± 1 (CI = 7 to 9)[ab] | 9 ± 1 (CI = 8 to 10)[ab] | <0.001* |
| Competence[2] | 5 ± 0 (CI = 5 to 6) | 6 ± 0 (CI = 6 to 7)[a] | 7 ± 0 (CI = 6 to 8)[a] | 7 ± 0 (CI = 7 to 8)[ab] | 8 ± 1 (CI = 7 to 9)[ab] | <0.001* |
| RLS Total[3] | 64 ± 2 (CI = 61 to 67) | 66 ± 2 (CI = 62 to 71) | 72 ± 2 (CI = 67 to 77)[ab] | 72 ± 3 (CI = 67 to 77)[a] | 75 ± 4 (CI = 67 to 82)[ab] | 0.015* |
| QRT HA[4a] | 14 ± 1 (CI = 13 to 15) | 11 ± 1 (CI = 10 to 12)[a] | 12 ± 0 (CI = 11 to 13)[a] | 12 ± 1 (CI = 11 to 14) | 11 ± 1 (CI = 9 to 13)[a] | 0.036* |
| QRT U[4b] | 17 ± 0 (CI = 16 to 18) | 17 ± 1 (CI = 16 to 18) | 16 ± 1 (CI = 15 to 17) | 16 ± 1 (CI = 13 to 18) | 17 ± 1 (CI = 16 to 19) | 0.549 |
| QRT R[4c] | 17 ± 0 (CI = 16 to 17) | 16 ± 1 (CI = 14 to 18) | 18 ± 1 (CI = 16 to 19) | 17 ± 1 (CI = 14 to 20) | 18 ± 0 (CI = 17 to 20) | 0.54 |
| QRT CR[4d] | 17 ± 0 (CI = 16 to 18) | 15 ± 1 (CI = 14 to 17) | 16 ± 1 (CI = 14 to 17) | 16 ± 1 (CI = 15 to 17) | 17 ± 1 (CI = 15 to 19) | 0.315 |

*significant effect for time for the indicated variable at $p < 0.005$
[a] significant difference from baseline
[b] significant difference from 6 months
[1] Self-report using an 11-item Likert scale. Range 0-10.
[2] Self-report using an 11-item Likert scale. Range 0-10.
[3] Reflective Learning Scale (Sobral, 2000). 7 item Likert scale from 1 (never) to 7 (always). Range 14-98 for total score.
[4a-d] Questionnaire of Reflective Thinking (Kember et al., 2000). 5 item Likert scale from 1 (strongly disagree) to 5 (strongly agree). Range 4-20 for each subscale.

Table 7.7 Means, standard errors and 95% confidence intervals for written RP levels over time (as rated by research team)

| | 6 months (*n* = 13) | 12 months (*n* = 10) | 18 months (*n* = 6) | 24 months (*n* = 2) | *p*-value |
|---|---|---|---|---|---|
| RP Level[5] | 4 ± 0 (CI = 3 to 5) | 4 ± 0 (CI = 3 to 5) | 4 ± 0 (CI = 4 to 5) | 5 ± 1 (CI = 4 to 6) | 0.224 |

[5] RP level as rated by authors using adapted scale Adapted 'Assessment of Reflective Level' scheme (see appendix 14).

Table 7.8 Individual written RP levels over time (as rated by research team)

| RP Level[5] | 6 months (*n* = 13) | 12 months (*n* = 10) | 18 months (*n* = 6) | 24 months (*n* = 2) | Level change over time |
|---|---|---|---|---|---|
| Peter | 4 | 4 | | | 0 |
| Eddie | 4 | 4 | 4 | 5 | 0/0/+1 |
| Craig | 3 | | 4 | | +1 |
| Katya | 5 | 6 | 6 | | +1/0 |
| Esther | 5 | 3 | 4 | | -2/+1 |
| Jenna | 3 | 3 | 3 | | 0 |
| Laura | 4 | 4 | | | 0 |
| Julie | 4 | 6 | | | +2 |
| Jimmy | 3 | 2 | 4 | 3 | -1/+2/-1 |
| Shane | 6 | | | | NA |
| Jake | 4 | 3 | | | -1 |
| Rachel | 3 | | | | NA |
| Charlie | | 4 | | | NA |
| Katherine | 4 | | | | NA |

[5] RP level as rated by authors using adapted scale Adapted 'Assessment of Reflective Level' scheme (see appendix 14).

### *7.4.3 Qualitative Findings*

The following section aims to explore the qualitative data obtained via semi-structured interviews in order to answer the qualitatively aligned research questions described at the outset. The general themes identified from the longitudinal semi-structured interviews were the *perceptions*, *processes*, *techniques* and *benefits* of RP whilst engaged in BASES SE (including workshop impact) as well as the *barriers and facilitators* to RP engagement. Each general theme contained sub-themes, and verbatim quotes are presented in support. The temporality of the themes is sensitive to the longitudinal period of data collection, where each theme explores the respective transitions throughout the period under examination. A more summative approach is utilised for the remaining themes of outcomes and contextual issues.

*7.4.3.1 Pre-workshop perceptions of RP (retrospective reflections).*

Within their first interview which took place six months after the BASES RP workshop (T6), all participants were asked to consider their perceptions of RP prior to their attendance, where some were associated with expressions of complexity and difficulty, resulting in a perceived lack of competence (and perhaps confidence) in RP ability. Charlie, registered in the discipline of physiology, stated: “I'm really bad at reflecting on myself, so when I knew I had to start reflecting, I was like, ‘No’…. It's very difficult”. Others, including those aligned to a psychology discipline also recalled the process of RP as challenging, even when they perceived to have some prior understanding or awareness of its value, for example:

> Craig: “I would say that I understood why we did it [RP], but I found it very difficult” (T6)
>
> Esther: “I think I knew a little bit. I think I knew it [RP] was good practice to do, but I think I didn't really know how to do it” (T6)

One challenge often associated with the pre-workshop difficulties with RP related to the foci of reflection, suggesting that a lack of applied experiences to reflect on caused an issue prior to SE, which consequently resulted in a lack of engagement. Pre-workshop perceptions of RP were also coupled with statements about its value and importance. Indeed, almost a third of participants described perceiving RP as not important or valuable when they were first introduced to it. For example, Jimmy, reflecting back on earlier held views on RP whilst engaged on a postgraduate course stated: “I don’t want to be as harsh just saying a waste of time, but yes, [it was] a waste of time”. A deeper explanation to holding such negative views towards RP was offered by Gary who admitted “I probably attributed reflective practice too strongly to the fields of psychology and behavioural...social psychology, and as a physiologist, didn’t really value it as much as I should’ve done” (Gary, T6). This presumed alignment between RP and the discipline of psychology was also indirectly supported by another

participant who aligned to physiology, stated that “I was the type of person that, in the second year it couldn't come quickly enough so I could drop psychology and just focus on my physiology for third year” (Shane T6).

*7.4.3.2 Post-workshop perceptions of RP (current reflections).*

After the workshop, some participants identified that earlier difficulties experienced with RP had reduced, including Charlie who after the workshop described RP as:

> A lot easier. It's a lot easier to do…. I think it helps me with my practice a lot better, so when I'm working with all these patients that I'm working with, it helps me to reflect on how I interact with them. So obviously at the start, I wasn't really sure how I should be sort of building rapport with them, but now, because I've been working with all these different patients for that long, and I've been reflecting on previous situations, it's helped me be a lot more confident in speaking to them and approaching them. (Charlie T6)

Another participant described how his views on RP had changed compared to those held beforehand: “I probably did see it (RP) as a tick box process, whereas now I see it more as a development process, and I value it more, knowing the things that I found out doing supervised experience” (Shane T6). Also aligned to the discipline of physiology, Rachel highlighted that having a workshop presenter in the same discipline as herself was beneficial, contrasting to her previous experiences where RP had been taught by people outside of her area thus affecting her engagement with RP:

> When I did the BASES workshop on reflective practice, it really changed it for me, and I think it was because it was applied to my own practice. [Presenter name] was a physiologist as well, which was really useful, whereas on the [course name] module, it was all education based, and I was a bit, like, mmm... So, I think it’s really important that it’s applied to your discipline or area, and now I can understand the benefits of it. (Rachel T6)

After attending the RP workshop, many participants also reported increased awareness of the processes and techniques involved in RP. For example, Jenna stated that the workshop “opened my eyes a little bit more to how reflective practice could be used and the benefits of it” (Jenna T6). Several participants specifically highlighted an increased awareness of the variety of ways RP could be implemented that were not evident prior to attending the workshop, which, as explained by Gary resulted in “opening your mind to the variety of ways in which reflective practice can happen” (Gary T6). Craig supported this stating that the workshop:

> Opened my eyes to different ways you can reflect. It could be just you making some rough notes, or doing a voice memo, or just doing a mind map and things, and I found that really quite useful with the work that I was doing. (Craig T6)

Esther also described the impact of the workshop on her awareness about techniques, learning that RP:

> (RP) doesn't have to be written, and there are other ways you can reflect. You can video it, you could do an interview-type thing, and make some notes and take a photo of them, so I've done that quite a few times. And then also the different models and the different kind of reflective theories that are out there were quite useful. (Esther T6)

Jenna elaborated further on how the workshop had revealed different ways of engaging in RP rather than sticking to one format provided by her supervisor:

> The reflective practice (workshop) taught me that actually I can go away from [my usual] format, and there's lots of different ways you can do it, and it's not, no way is particularly right or wrong. It's just the process you go through. (Jenna T6)

Others described how the workshop had increased their awareness of the varying depths or levels of reflection that exist. The workshop introduced the delegates to this by using *The Park* by Jenny Moon (2004), which outlines a written reflective account of an incident, but provides four different versions of increasing depth and criticality. Several participants highlighted this particular exercise as a catalyst in increasing their awareness of the depths that can be attained in their RP:

> I think that for me was quite a nice way of showing what BASES want, in terms of a reflective report, but also, it stuck with me, so I was really conscious, when I was writing my reflections, especially for my final report, I was really conscious of making sure that I was linking why I did something, to my own beliefs, I suppose. I think out of everything that was covered on the day, I think that bit stuck out for me the most, and just to do reflections in a way that suit you, but allow you to get across the points that you want to make as well, and that there's no one right way of doing it. (Peter T6)

This example, according to some, also helped to demonstrate an example of how to write reflectively, as well as how to include more affective or emotional content within RP.

> [The workshop] really helped me just to learn a bit more about how, maybe, you should be writing your reflective practice, in terms of the feelings and emotions involved, and that's quite hard sometimes to write down completely honest...especially when you know that someone else is going to read it maybe, being completely honest with yourself on how you felt at the time, than just an account of what happened. When we looked through the [The Park], I found that quite useful to see the difference between. (Katherine T6)

> [The fourth example of 'The Park'] went into much more detail, and I was like, oh, ok, that's the kind of level we need to go to. I'm not good doing that. I do it in my head, but I don't write it down and I don't say it. (Esther T6)

Impact of the workshop on depth of RP was noticeably highlighted by Jimmy who recognised that his reflections evidenced for BASES SE had changed in depth since his attendance:

> As you go down my practice log and look through my reflections, they're all what I have done (description), which is a lot longer than my reflection on it, until you get to that [RP] workshop, and then it goes the other way, which I guess is good. (Jimmy T6)

*7.4.3.3 Post workshop: RP processes.*

The following section outlines the key processes of RP experienced by the participants within BASES SE and the changes that took place over time. In addition, factors that contributed to these experiences were also explored where possible. The RP related processes described were: frequency of RP, proximity of RP, breadth of RP, and content of RP.

*Frequency of RP.* Within the initial interviews (at T6), many participants provided an illustration of the *frequency* in which they engaged in RP, which varied considerably. For example, some engaged regularly in RP either on a daily basis, weekly or a monthly basis. One was not engaging in RP at all at the stage of the initial interview, due to other priorities being more important on their time. Others' frequency of RP related to the frequency of applied work being undertaken (e.g., reflecting after each session delivery), which as a result could be often or infrequent, and at times irregular. However, Shane, for example, engaged in weekly RP in a designated slot, regardless of how much applied work had been conducted:

> I'll have sort of just Friday for a day of CPD… but because my BASES SE is such a big part of what I do, it seems to be more frequent. So at least now I'm doing something formally sort of once a week, whether it's continued from whatever I was working on the last week in terms of a reflection, really trying to tease it out, or whether it's just something new, I'd probably say at least once a week now. (Shane T6)

Follow-up interviews (T12-T24) revealed some changes to the initial frequency patterns of RP engagement as detailed at T6, with most participants expressing that their frequency of RP engagement had actually reduced over time. For example, Craig, who was initially engaging with RP two or three times per week, was some six months later only doing so approximately once every two weeks. Attributing such declines in frequency also to a new job, he stated:

> Because of my time restraints I struggle to find a big period of time to sit down and write, so it's been a bit of a struggle, that is with the new job, it has kind of hampered them (my reflections)… I'm getting to terms with it now, trying to balance and find time alongside my other training and schoolwork. (Craig T12)

Another reduction in frequency was voiced by Shane, who was previously (at T6) engaging in RP on a weekly basis in a purposeful and designated slot. However, within subsequent interviews, this engagement with RP declined due to reduced time in applied settings. He described his RP as "a lot less frequent now, about once every two to three weeks, but just because that's the frequency that I'm actually doing something practically orientated" (Shane T12). Similarly, Esther also described a reduction in frequency of RP:

> I was fairly consistent until recently...everything was really busy. Normally I'd try and get it (RP) done by the maximum like two days later, try and do it following the session if I can. But there was a period where I had loads going on, and I just didn't seem to be able to reflect on them, and I'd do one (session), and then I'd reflect on it, but then I'd have like another meeting, so they just kind of kept piling up. (Esther T12)

Some participants provided explanations to accompany this less frequent engagement, which mainly included other priorities (e.g. work, studies, research) and discussions around a lack of time, including Charlie who in her final interview stated: “I've just sort of put everything on a standstill. And because I've got just so much more busy with my PhD, because I'm in my final year, I've just sort of shoved it to one side” (Charlie, T18). Another participant expressed feelings of guilt when not focusing on her full-time PhD role in favour of BASES related activities such as RP: “I think at the moment I feel guilty if I had set time aside, that I should be doing my PhD in that time” (Katherine, T12).

*Proximity of RP.* Several participants alluded to the *proximity* of their RP, describing how soon after or close to an event they would engage in RP. Some reflected soon after the event (e.g., immediately after delivering a session or within a day or two) or at the very least would make quick notes on what happened immediately after, for example:

> We have a slot in the day between three and four where there's no players at the club, and I'll try and type it (my RP) up quite quickly then, just what happened, and then I'll go back to it a few days later and fill in the gaps, and I put "To be continued" at the end of some of them, and then I reflect on it a few days later. (Julie T6)

Rationales for engaging in RP close after an event related to better memory recall and accuracy, especially in circumstances where ongoing client support was the focus:

> It was advised in the workshop to get it down as and when you can, or maybe as you go along just make little notes. So I've definitely tried to do that because there is things that happen that you're like, "Oh, that was an interesting comment", and then you try and think about it on Sunday and you can't remember it, and then you're paraphrasing people and this, that and the other, and it just doesn't work. (Laura T6)

Other participants engaged in a much more delayed process of RP, where in effect, reflections would be ’stored up’ for a later point in time, as observed in Jimmy’s quote:

> There was a time when I literally just sat and did it all (my RP evidence). It was September. So I just did it all in September. And then I passed my halfway submission in, I guess, October. And then since then I've just not done anything. (Jimmy, T12)

*Breadth of RP.* At T6, most participants appeared to be reflecting from a narrow perspective (e.g. session by session, or on every contact with a client), which for some could be several times per week. Over time however, breadth of RP appeared to increase or widen, whereby participants began to reflect on groups of sessions or experiences, providing a wider view of what may have happened within those events. Some thoughts on a change in breadth of their reflections were offered by Jake and Eddie:

> The time I spent with the rugby club, it’s not about how I’ve done something individual, that session, how did I do that session, it’s more about, how did I conduct myself throughout the period of the support? How did I work with people? How did I develop the athletes or the coaches, or the people under me? How would I go about it the next time I’m in that position, the things I would avoid doing, or saying? That’s definitely been more apparent now after the workshop and towards the end of BASES than it

> was beforehand. Beforehand, it was definitely specific sessions, specific tasks. (Jake T6)

> I guess it's (RP) evolved a little bit from when I first started out, where I would have been logging most incidents, and that has probably helped me become better in the practice. Now it would be looking at critical points, or looking at it in maybe over a block, or with one individual. (Eddie T18)

An example of such a transition in breadth over time can also be seen in the following excerpts from Laura, where her RP transitioned from focusing on session by session reflections or on every contact with an athlete, to planning ahead in making life-impacting decisions such as those linked to career choices:

> For my BASES SE I'll pick one thing per workshop or per client encounter that I have, I'll reflect on that… I'll pick what I think's the most pressing or the most important thing. (Laura T6)

> I think there's other areas that I'm going to start delving into, for example not just using reflection to enhance or improve my practice, but also to try and solidify what it is I want to do with my life… having a think about what it is I'm enjoying, or what it is I'm not enjoying, and then trying to tailor a career for myself based on that. (Laura T12)

> I've come to the realisation that instead of looking through reflection for what I want, I'm going to try and look at what I don't want, and I think that'll help me to make a decision. So, one of those things would probably be like my weekends taken up every weekend. I don't mind working a weekend or every other weekend, but every weekend, so that already rules out things like football. (Laura T18)

Such increases in breadth, as seen in Laura's case, allows for consideration of the wider impact of decision making and associated implications for such decisions, thus potentially leading to more critical levels of RP, which may also depend on the foci (or content) of the RP itself. This is also highlighted in the following excerpt from Esther who described how her awareness of breadth increased based on feedback from others:

> I've realised, since I've read your feedback and my reviewer's feedback, about being more concise, and I think I need to think bigger picture, in terms of me, and not as much focusing on other little details. So maybe just looking at one particular thing that happened within that session, and reflecting on it deeper, "What am I doing? Why am I doing it?" I don't think I question why. I think I do a lot of what, but not why. (Esther T12)

*Focus (or content) of RP.* The early content of participant RP at the outset (e.g. pre-workshop) appeared for the majority to be focused on session effectiveness or appraisal; for example, evaluating what went well and what did not go well, and what could be improved for next time, as exemplified in the following quotes:

> I probably thought of it (RP) more of an evaluation, in terms of, if I'd done a session, how could I have made it better, how could I improve it… I'd be thinking about the mechanics of the session; I could've changed the structure, or I could've asked this question, or I could've done something; I could've done the activity in a slightly different way. I thought of it (RP) as more of a mechanical thing. (Peter T6)

> We did some of it (RP) at undergraduate as part of a placement module, and it was really systematic, so it was kind of, what did you do, what went well, what didn't go well, reflect on what went well and why, reflect on what didn't go well and why, what would you do differently next time, and then picking a kind of a key message or a key point from it. (Julie T6)

> I'd just write down what I did, probably why I thought it was good or bad, and that is probably it. (Jimmy T6)

However, post workshop and further into the SE process, the content of RP seemed to change or develop for some participants, to include or focus on other things, such as interactions with others or their personal values and beliefs. An example of this was offered by Julie, who described her reaction to a situation with a young athlete which left her questioning her actions towards him and the potential cultural impact of the sport she was working in at the time:

> It bothered me for a while how I'd reacted, and I think thinking about that and trying to make sense of how I'd become a person that would react that way, why I'd done that and was that the culture that had an influence on me? Why was I just immediately kind of jumping to conclusions? That took a lot of kind of getting over and reflecting on and learning from it. (Julie T12)

Another participant described how her 'default' approach of reflecting and focusing on the negatives within her practice transitioned to focusing more on the positive aspects of a given situation, and the impact that can have on confidence, for example:

> I used to just think reflection was just about negatives, So I've tried to kind of, when things go well, take longer, because it helps to build my confidence when I reflect on things that went well as well, and also it's sort of like cements into your philosophy and practice and stuff, things that work, rather than how to fix problems. (Laura T12)

For others, their RP transitioned from being lengthy and descriptive to being more concise with more of a questioning focus over time suggesting a change from focusing on *what* happened to *why* something may have happened:

> I used to be very descriptive, and I'd try and remember all the details of the session to start off with, and perhaps less questioned *why* I was doing it… whereas now I'm still descriptive and I'll try and get the key points in, but I won't try and talk about everything, but then recognise now I've got questions, and how do I take that forwards? Or I'm not sure if that was appropriate at that point, and should I have really said that?" (Esther T18)

*7.4.3.4 Post-workshop: RP techniques.*

A variety of RP techniques were discussed within the interviews with participants. The following section will explore these in terms of written and verbal techniques, individual and shared techniques, formal and informal techniques, structured and unstructured techniques, as well as exploring how each have transitioned over the period under exploration.

*Written RP.* Whether using traditional pen and paper, or typed on a computer, written techniques appear to be the most commonly used and reported mode of RP that participants

engaged in. Written RP was described as supportive in the processing of information, helping to improve clarity of thought, gaining perspective or depth, or slowing down the pace of thinking as indicated in the following quotes:

> (RP is) something that helps me a lot to think about things, put them into perspective, and to move on from them… if I don't actually write the reflection, I'm constantly thinking about it, so it's not like you can have any form of closure. (Julie T6)

> I do think that while I'm typing, I think on a deeper level, and I'm reflecting as I'm writing, I'm reflecting on what I'm writing, whereas when I talk, I just talk, and I'm not really thinking as much. It's just, "this is what happened, this is sort of what I think now". (Esther T6)

However, even though written RP was most frequently utilised method, some described some of the challenges with written RP. An example came from Esther, who although felt that written RP was beneficial, also grappled with *who* it was being written for, and as suggested in the following quote, perhaps leading to distraction and confusion:

> My question sometimes is "who is this for?", because sometimes I feel like I'm doing it for the reviewer and doing it for my supervisor. And then I'm like, "Oh, what do I need to write, how do I need to write this, or how should I be presenting this?" And I think I'm almost more aware of that, even though I think as I type and then I read it back later, and it doesn't really make much sense. (Esther T6)

Later in the SE process, a similar example was described by Jenna, who also appeared to be conscious about the readers of her written RP, even though she appeared to understand it as a beneficial developmental process:

> I still do struggle a little bit with it (written RP), in terms of what to write sometimes…. I write a reflection as if people need to read it, whereas a reflection shouldn't be really for people to read, it should be more for me to go through that process. So I am getting better, but I still read through it several times and make sure it all makes sense, if anyone else was going to read it. So I still go through a process of writing it so other people can still read it. (Jenna T12)

Shane described a more emotional or affective concern about engaging in written RP regardless of who would view it, stating, "Even if it's only me that's going to see it, just to get it on paper's quite a vulnerable exercise" (Shane T6). Moreover, Shane also described a more practical issue with his written RP both at T6 and T12:

> I can't just start with a blank piece of paper… Because I'm not very good at writing, I think that confines me sometimes. And that's sort of made me realise, "Hold on, maybe the reason that I haven't been able to be really sort of critical and deep and thought-provoking on paper is not because of my reflection or my mind, it's just because of my writing skills". (Shane T6)

> I feel that the work I do on paper doesn't actually reflect the knowledge that is in my head… it's almost trying to speak in a different language sometimes. You know the right language to use, and sometimes you write a sentence and you're like, "No, that doesn't sound right", so you delete it and start again, and it doesn't just flow. (Shane T12)

*Non-written/verbal RP.* Regardless of some of the perceived challenges using written forms of RP, all participants continued to submit evidence of their RP engagement using this format to BASES as part of their SE documentation. However, participant interviews revealed that alternative (non-written) techniques of RP were also utilised, including verbal or dialogical techniques, where corresponding benefits included increased awareness, sense making and information processing. For example, Shane stated knowing he "get(s) a lot more out of sounding something out before I go to write it" (Shane, T6) suggesting that verbal RP also offers a chance to process information and make sense. Peter stated that "thinking out loud" helped his awareness: "I think by going through that process, I make myself realise stuff, as well. So, it's probably self-realisation" (Peter T6), whereas Laura supported and elaborated on this further at a later stage of the SE process:

> I think sometimes it's only when you verbalise things that you realise and it just twigs, (like) earlier, when I said about mindset change, I didn't actually realise that until I just said it out loud… before, I would have seen it as a failure, whereas now I see things as an opportunity to learn. I never actually thought about it that way until you have asked the question, and then it's come out. So I find that it [verbalising] sort of helps to crystallise why you're doing things. (Laura T18)

Another benefit of verbal RP was associated with time efficiency and productivity. For example, Shane described:

> I do quite a lot of driving, and in a day, that can be six hours. So on the way (to a session), I try and stick a few podcasts on, but on the way back, I'll stick my earphones in and reflect on certain things, but just by talking. I haven't really listened to any of them back yet, but just by actually talking, it makes me really think about what I'm saying… It's really sad talking to myself in the car, but it helps me to get things on paper. (Shane T6)

However, verbal reflection was not favoured by everyone, as indicated here by Jenna in talking about using such techniques compared with a more traditional written mode: "I get quite tongue-tied sometimes when I talk. So, writing it does organise my thoughts more" (Jenna T24).

Another utilised form of verbal RP was in the form of video reflections, which Jake began to try after attending the RP workshop: "I started doing videos, these reflective accounts of me and a tape recorder… I don't think you quite get the same impact on paper" (Jake T6). Picking up in later interviews, at T12 Jake suggested that he had felt he achieved his 'strongest' RP using a video-based verbal method, and in T18 explored his experiences and the impact of this method of reflection in more detail:

> I noticed dramatically when I did the video reflections that my (applied) work was much more efficient. I was much more focused, I knew what I needed to get out of the next month, or the next two months, and it helped kind of organise my mind. (Jake T18)

In addition, Jake was the only participant who actually submitted non-written reflections as evidence of RP engagement for one of his BASES submissions, providing the following reasons for doing so:

> I think it (verbal RP) was strong because I was probably more honest. When I'm talking, I tend to get more emotion and thought than I do on paper. On paper and on computer, you tend to have to think about the sentence too much. You think about what you're writing, whereas it was a bit more organic, speaking about it, it was very much whatever popped into my head I said it, and I reacted to it, and I thought about it. Speaking was more free, it was more like whatever I want to talk about I can talk about. So I think it allowed me just to get a better understanding of what I was thinking, and get more out of it. (Jake T18)

After attending the BASES RP workshop, where many participants suggested how their awareness of a variety of techniques had increased, it was evident that several began to engage in such varied modes, including verbal or conversational techniques of RP. However, for most, engaging in verbal reflection appeared to be only part of the overall reflective *process*, whereas actual 'evidence' of RP for BASES purposes was still mostly presented in a written format, as exemplified here by Peter:

> For my (BASES) report, all mine [reflections] were written – I didn't put any sound files, or anything like that in there. The only reason I did it that way (written) is so that when it came to my report, I could then bring them all together and hand it in as one thing. But, I think, if I'm not doing it for the purpose of BASES, then I think I probably do more, either loose notes, or sound files, and just talk about the sessions that I did, and how they went, so that I can then refer back to them if I need to. Then, if I need to write them up as evidence, then I can. I'm not sure that I'll continue writing them, just because of time, really. (Peter T6)

In addition, Shane offered a rationale for preferring audio reflection over written methods, highlighting that "you can't go back and delete what you've said. You just carry on…" (Shane T12).

*Including others.* Interviews revealed that all participants engaged in individual RP throughout their BASES SE journey as a default, as exemplified in their submitted evidence of RP. Whilst some were content with an individual RP process, others disclosed feelings of isolation and loneliness as illustrated by Esther in her initial interview: "I'm probably quite alone in the (SE) process, and actually I'm not chatting to others, which would be really helpful". Some participants incorporated other people into their RP where benefits included being able to improve understanding and make sense of experiences, either cognitively or emotionally. For example, initial thoughts from Jenna on sharing reflections with fellow trainees were:

> I quite like talking things through, because it makes it a bit more sense in my head… it's just an easy way to see, how you feel about that, or I felt this, and I felt that. (Jenna T6)

However, in a later interview, Jenna appeared to be less reliant on the shared process with her peer, and a more relaxed view of an individual learning journey when engaging in RP was apparent, but inferred that a shared process was still a welcome bonus as opposed to a necessity as earlier:

> I think I feel more able, or more comfortable to reflect on my own, but because we have quite a long train journey and there's two of us, it's quite nice also to discuss how the day went, or get their opinion on things. So it's quite nice to do it by yourself, but it's also quite nice to talk to other people. (Jenna T12)

Others described how shared RP helped to regulate or authenticate negatively perceived feelings or emotions that may be experienced, providing a change in perception or an element of relief for a novice practitioner on a new learning journey where anxiety could be elevated. One such example came from Laura, who suggested:

> I do find that it's (shared RP) kind of helped me to also normalise some of the stresses that you have in the elite world as well, because sometimes you can think, "God, is this just me? Is this just me in the organisation I'm in, or is this just how I perceive things?" But it's good to see that other people have those dilemmas. (Laura T18)

Some participants, in their descriptions of shared RP experiences and associated benefits, suggested the types of people who may be involved in such a process, with specific examples including those individuals with comparatively more experience or those classed as experts, such as a supervisor perhaps. Others provided examples of shared RP with peers or similarly experienced individuals, with one example from William who found seeking feedback from colleagues and having subsequent discussions about practice as helpful:

> One of the things that I do try to do is get colleagues to observe my sessions with athletes, as often as is practical, so that I can sit down and look with them, and highlight, if I've got any thoughts or feelings or something, I can bounce it off them and see if it's something they've dealt with before, or if it's something that they notice about my practice. That's probably the biggest thing that I've done, or the biggest way I've developed, having someone observe me and be able to bounce a few things together. (William T6)

Several participants reported that learning with or from others on similar journeys or with similar levels of expertise was a fundamental and beneficial process of shared RP, such as the RP workshop, especially when opportunities to connect with others is limited, as in the case of Esther: "I think workshops have been really useful for that (shared RP), and when I've been at them, I've just chatted to people" (Esther T6). Laura went on to describe why such events were viewed positively:

> The best part that I enjoy about all the (BASES) workshops I've been on… It's just how they all facilitate the people with the discussions, so if people want to talk, they let them talk, and it's very interactive, and I think that's the best way… I learn that way, I learn better with anecdotes and when the people are open about their own practising. (Laura T6)

In a later interview however, it seemed that such connections were not always viable or sustainable, as illustrated by Esther, who although still appeared to value shared RP, was still lacking connections with others to engage in the process itself. She described:

> I think having other people's ideas is always good, because obviously if I'm just getting one person's ideas, I've only got that way of thinking, whereas if someone else has got a different idea, it's quite nice to be exposed to different ways of thinking, different perspectives, different experiences. I think it's always good to get other people's opinion when it's available. (Esther T18)

A combination of shared and individual techniques was highlighted as beneficial for some participants, as described by Jenna about how she engages in RP with a fellow trainee practitioner both before and after delivering a sport psychology workshop to overcome potential issues in individually written techniques:

> We tend to sort of talk things through, we'll talk through the session, and on the way back we'll sort of talk the reflection side of it… and then when you come to doing your (own) reflection, it's a little bit easier to write, because you've just talked it through with somebody. So, I think it flows a little bit easier than if you just have a sit down and think, "All right, what did I do?" That way round works best, for me. (Jenna T6)

Whilst obvious changes over time appear varied with regard to individual and shared RP, the data does appear to suggest that involving *others* in the process of RP, regardless of level of expertise, has multiple benefits. Such benefits in addition to sense making and improved or new understanding, include the consideration of new perspectives, the challenging of habitual practices or as a means of emotional support or validation. In addition, accessing such benefits through shared processes of RP, could allow deeper levels of reflection, through processes such as reflective questioning. An example of this was observed in Julie, who although desired to engage more in shared RP with other trainee practitioners, still managed to engage in shared RP and access similar benefits with her supervisor. She described: “He (supervisor) would kind of give his perspective, ask me, and he would question me, he would challenge me quite a lot” (Julie T6).

*Using RP structures and frameworks.* Another theme extracted from the interview analysis focused on the use of structures or frameworks to support RP engagement, where some participants described the facilitation that RP frameworks can provide and support in overcoming an inertia effect of a blank document or in guiding the RP process. For example, Katherine suggested that a framework: “helps me start off the writing than just staring at a blank piece of paper” (Katherine T6) whereas Eddie, specifically in relation to the Gibbs cycle, stated that: “Using the model actually guided me quite well in the reflective process” (Eddie T6). Some indicated specifically that the RP workshop had also provided further support and clarity on RP frameworks, including how they can help achieve more depth, as indicated here by Gary and Laura:

> Before the workshop, I think I focussed too much on, here's a box, here's a process, and I think now, what I try and do is think, what are they (the frameworks) asking me to do, and then just categorise the different elements. (Gary T6)

> I've just been comfortable with that (Gibbs cycle) since uni days. I feel like I'm doing it right now, though, because before (the workshop), I probably wasn't, well I know I wasn't exposing every step the way it should be exposed. It was kind of just like, "Just get me to step number six". But now it's a lot more beneficial and more in-depth and that sort of stuff, and it is definitely down to the workshop. (Laura T6)

Beyond the workshop however, some participants developed a personalised RP strategy, as recognised by Gary, who said: "I tend to find that different situations would probably fit different models better or worse than others" (Gary T6). A more detailed example of this is described by Jake, who developed a very clear personalised RP strategy after the BASES RP workshop, utilising a specific framework for specific situations, thus removing some of the decision-making time that often is required when engaging in RP in choosing a method or process:

> I use Gibbs cycle more for tasks. If I'm trying to improve my skill, then all I really need, personally, for me to know is, did I do that part of the test well? If not, why? What do I need to do next time? So, it gives you this very clear guideline, and that way you can be quite brutal about the test (…) literally about a day or two after the workshop; I kind of just looked at myself and said, 'What do I need?' and that's why I came up with the decision of, right, Gibbs Cycle, great, that's my technical stuff. (Jake T6)

Rather than rely on existing frameworks in their original format, others shared examples of how they had blended or adapted existing frameworks for their own personal use. Shane, for example, took elements from various frameworks enabling him to delve more deeply into the situation in hand that may not have been possible if using the original version alone:

> The initial one (framework) that I went with was the Gibbs cycle, because that was just almost easy, it was like a little interview to myself, but then I liked the idea of adding in some of the prompt questions from the Anderson model. So I've just done one (a reflection) now where I had my description, feelings, evaluation and analysis, and I've done bullet points, and then I looked at the Anderson one, and I started reading the questions, and there were one or two questions that, "oh yes, I could probably add that in there", and then those bullets I'd just sort of pad out with text after that… So I like that idea of like a hybrid dual stage, using Gibbs and Anderson. (Shane T6)

Another similar example of a "little interview" was observed in Laura, who felt so comfortable with her chosen framework (Gibbs) that she had transitioned to simply using the questions from the cycle and cognitively worked through them, stating: "I ask myself the questions rather than think about the model" (Laura T12). However, not all participants spoke favourably on RP frameworks, with some describing associated challenges, for example, feeling compelled to complete all stages, fill in all boxes and answer all questions: "I think in my head I've got to fill all the boxes out. And I stress when I don't. I think in my head, because there's a box there I've got to write something in it" (Jenna, T6). Revisiting this participant later in her SE, she described how this was still a challenge when using a framework, but rather than an affective,

panicked response, she had transitioned to a more cognitive, calm response in asking herself more questions about the process she was engaged in, perhaps indicating that positive developments had taken place (e.g. understanding, acceptance):

> I'm still using the same template, but I've tailored it a bit more to me... I need some sort of structure, that sheet of paper I use gives me, but then sometimes I think, "Am I writing stuff for the sake of writing stuff still?" And the box I always struggle with is applying it into your practice, so I sometimes still struggle to make that link from that place to applying it. (Jenna T24)

A further challenge linked to RP frameworks was linked to a perceived repetitiveness, particularly when reflecting on the delivery of sessions that may be very similar. However, in one case, the respective supervisor was able to advise and suggest how to deal with such repetitiveness and suggest a way of overcoming this by introducing a different breadth or alternative focus:

> I've started working with two very similar age groups, doing similar topics and I was just doing Gibbs model reflections each time I did a session, but they're all very similar and quite repetitive. So what I started to do after a discussion with my supervisor was to do more of a mind map, a general reflection on the session, and then if anything significant happened, then I should just focus on those for more detailed reflection, by following the Gibbs model. (Craig T6)

Similar supervisor support in the use of RP frameworks was described in the case of Julie, who had been introduced to a strengths-based tool (Ghaye, 2011) at the RP workshop which she had since positively utilised, particularly when she was feeling overly negative. In a later interview, she described an instance where her supervisor prompted her to use this again recognising that a) she was feeling negative and b) she had benefitted from this in the past:

> Last time I met [my supervisor], we did it (the strengths-based framework), but not with regards to practice, because we were talking about jobs. He was like, "Why don't you do that, so that you can see?" Because all that I kept looking at was, "I haven't got this, or I haven't got that. I'm not this, I'm not that", and he was like, "Well, why don't you do your strengths? And then why don't you look at how you can build upon those strengths, and why don't you reflect on actually where you are now compared to where you started with your PhD?" (Julie T12)

Thus, Craig and Julie provide two examples of how a supervisor can support and facilitate the RP process beyond the RP workshop, where in both cases, benefit was observed and solutions to issues were reached with such support and facilitation.

#### *7.4.3.5 Benefits of RP engagement*

Many benefits of engaging in RP were disclosed by participants within the interviews conducted, from both a professional and personal perspective. Increased awareness was muted by several participants, which included that increased awareness of both positives and negatives within practice, where previously participants had focused only on negative aspects. Others commented that not only were they more aware of *what* was positive or negative about

an experience for example but were also more aware of and able to ask *how* and *why* questions about such experiences. Some participants described increases in awareness as a result of intentional RP use. For example, Jenna recognised she was more aware of her feelings and emotions prior to delivering a session after engaging in purposeful RP, something she had previously struggled to recall:

> The last couple of sessions I've delivered, I usually get there a little bit early. I usually just jot down a couple of bullet points, "I'm feeling this because of X, Y and Z", just a sentence or two, saying how I'm feeling and why, and that generally afterwards helps to trigger my mind. (Jenna T12)

Some increases in awareness were however more unexpected. Esther for instance described an example of how she commenced a sport psychology session feeling rushed and underprepared, but afterwards, upon reflection recognised she felt unexpectedly comfortable which came as a surprise to her.

> So there was a session that I had with two athletes, and it was one after the other… I'd come straight from work, and I felt really rushed and really busy, and I was like, "I'm not prepared, I don't know what I'm doing", and I just sat down and I felt ok, and I felt I didn't need to force anything, and I wasn't thinking about myself, I was able to just listen… but I was quite relaxed, and I didn't feel like I needed to specifically guide the conversation in any particular direction. I just let them guide it, and I think after that I was like, "Ooh, ok, that was unexpected", because I thought I would just not be able to concentrate and listen to them, but I was surprised by how ok I felt, and just able to listen, and I think that fits in as the direction or the philosophy I want to take, where I can just listen, and be available and be present. (Ruth T18)

Another example of an unexpected or unplanned increase in awareness as a result of engaging in RP came from Julie, who recognised that the interview itself (akin to a reflective conversation) triggered something in her that she wasn't previously aware of, highlighting that further attention may be needed:

> I think after speaking to you today, I think I need to make sense more of what's gone on over the last few months. So I haven't spoken about that, and I think you bringing that up has made me think, actually, yes, I probably need to deal with that, and try and maybe speak to somebody about it, rather than just keeping it to myself because I'm scared of what other people are going to think of me. (Julie T12)

In a later interview Laura also described how engaging in RP focusing on negative aspects of her practice also helped to improve confidence as a result of questioning and learning:

> If things don't go well, I'm sort of a bit like, "Right, let's sort this out", and it kind of boosts your confidence a bit as well, because I'm less harsh on myself. I think it comes down to the change in mindset, that I don't see it as a catastrophe as much anymore. I see it as, "Right, well, I can just do it better next time". (Laura T18)

Jenna provided another example of increases in confidence, where looking back over her early reflections as a trainee practitioner enabled her to see progress and how much she had developed, particularly focusing on the positive emotional changes:

> I think I am getting more and more confident and competent, and it is quite interesting to look back in terms of maybe the first season I did and looking back at my reflection then to where I've come now. I can remember back at those first sessions, and how much I used to panic, and in my reflections, I said I got really nervous, I was really scared. (Jenna T24)

This increased confidence consequently helped Jenna become more honest within her RP, something she had previously struggled with earlier in the BASES SE process:

> Since feeling more confident in the reflective process, I think (I'm) feeling a little bit more comfortable in opening up a bit more in that process, and it's not a sign of weakness, it's just a sign of growing in the profession. (Jenna T24)

Such increases in confidence were highlighted by one participant as providing 'more room for mistakes': "I've actually become more confident at what I do… (which) gives more room and space for mistakes in your reflections. But it is ok to make a mistake" (Katya T12).

Specific improvements in applied practice were also noticed through RP engagement by several participants. A commonly reported example of this included a shift in focus on the self to the needs of others (e.g., clients) and improved understanding of others. Improved communication was also reported, with specific examples relating to influencing others and obtaining athlete buy-in. Shane provided an example of such an experience, where through RP, he further recognised the importance of such interpersonal skills in his new full-time position compared to his experiences as a student working with athletes:

> I don't really recall any issues or problems in the past, with things like buy-in and receptibility and stuff like that, whereas now it's a massive part of what I end up doing. 80% of it is just convincing people to do the right things for me, to switch their GPS on and to not have a moan about it, and I guess, to have a bit more respect with it, and that that comes through mutual respect, so then you've got to try and find out and win them over. (Shane T18)

Another example was described by Katherine, where RP helped her to communicate with a challenging athlete who did not appear to want to engage in a fitness testing session she was conducting. However, after reflecting on the initial session where the athlete appeared frustrated and annoyed at having to complete the session, Katherine adapted her communication:

> Trying to make sure she (athlete) knows exactly from the start what's going on, she knows what's going to happen, and just trying to make her feel at ease as much as possible from the start. That's definitely helped, actually. In recent tests, she's absolutely fine, so I think it's going in with that, maybe do things slightly different with different athletes, depending how they respond to that experience, because not all of them want to be there. (Katherine T6)

Several others provided examples of how RP has enabled them to deal with challenging situations, either post-event or to plan for future possible scenarios. For example, Laura shared an experience where she had listened to another trainee share an ethical dilemma they had recently encountered. Although Laura had not experienced this situation herself, it

was indeed a possible and feasible quandary given the similarities in their shared practitioner setting. She described how she used RP to further understand her competence and boundaries within her practice should similar ethical situations ever arise for her, for example:

> There's lots of issues like that that I haven't actually come across, but I feel like it's so important to know what I would do, and have the boundaries, because then you create professional boundaries for yourself, and also your limitations are very clear in your own mind, whereas I always find unless you've thought about that it's very murky water. So I kind of establish a threshold for what I'll consider within my range or scope of practice, and then I've a very clear boundary line, and then past that, I'm not going to risk it. (Laura T12)

Finally, some participants also referred to RP as being helpful on a personal level, describing RP as *cathartic* and *therapeutic*. This idea was reported by Julie who described:

> It's (RP) therapeutic in a way, because it helps you come to terms with something, and if I've had a really long day, and then at the end of it I write a series of reflections, it's like, "Phew, I feel better now. That's the end of the day. I've got my frustrations and my thoughts and my emotions down on the page. We can start afresh again now", whereas sometimes I come home, and if I haven't had time to do anything, I can literally be thinking about it in bed, like I'm half asleep, but I'm thinking in my head, "Tomorrow I need to make sure that I see this person, because this is what happened, and what is such and such going to think after this conversation today?" and it gets on top of you. (Julie T6)

Additionally, several participants experienced some very difficult and challenging personal situations during the data collection period, including major surgery, bereavement and relationship issues. However, RP appeared to have provided some benefit during these difficult times. Regarding a personal bereavement, Rachel described:

> Obviously, I have reflected a lot on things personally; obviously caring for my dad was, in one way, similar, and there are actually things that I would like to translate into my own practice, from learning with dad … to be honest, I reflect on things every day, so yes, and I think in regards to personal, it's been more... Well, I suppose it is reflective practice, making sense of it, really trying to understand what's happened. But, that's all been in my own head, and talking to people who I feel close to. But, I haven't written anything down – I know this isn't meant to be that sort of conversation, but actually it's something I'd like to do next, is write those reflections down so that I could understand them a bit more. (Rachel T6)

Another participant specifically shared an experience where RP was used as a tool to help manage anxiety related to challenging personal circumstances:

> To combat my anxiety I used to take just time to myself to try and go through everything that's happened that day to just reassure myself, but also that's why I reflect a lot, because otherwise I just would get that feeling in my stomach, and I need to just take some time away from just noise and stuff, and just go, "Right, today this happened, this happened, this happened, this is good because this, I can fix this problem, it's not even a problem, stop worrying". (Laura T6)

> I think people reflect a lot on, or ruminate a bit about bad things, so I'm trying to make a conscious effort to be like, you can do that with good things as well, and you can

> improve your mood by just being more reflective about positive experiences too. (Laura T6)

*7.4.3.6 Barriers and facilitators to RP engagement*

The most commonly reported barrier to RP engagement was associated with *time*, which was highlighted by thirteen participants. One area of focus that impinged on RP engagement was based on actual demands on participants' time or the activities engaged in. This included employment, education and personal factors like family commitments and relationships. For some, such activities were not related or were completely separate to BASES SE related activity (e.g., full-time employment in non-sport settings) and therefore BASES SE resulted in time demands above and beyond such roles. This issue was summarised by Jake who stated:

> If you're in a fulltime position where you're doing applied practice, I think it's (RP) part of your job; I think you're supposed to set that time aside, but it's difficult – a lot of people on BASES SE will be part-timers doing degrees, or working for a university, or doing three or four different applied jobs. (Jake T6)

Others described their actual demands, which for some were multiple in number and totalled to more than full-time work:

> My biggest thing (barrier) is probably time, setting aside time to actually be able to do it (RP), because I'm working fulltime now, as well as doing consultancy part time, and completing my master's… it doesn't leave a lot of time to just think. (William T6)

Another time-related issue related to the competition of priorities, where often other things would take priority over BASES SE and the requirements for RP engagement (or evidence). For many, this often referred to commitments as a PhD student alongside their BASES SE, where the former always took priority, shown in this extract from Jimmy:

> Lab time is dying down massively because (my PhD) data collection's nearly complete, and I won't be starting the next study until after Christmas, just to have a bit of time off, so I'll have loads of time to fill in all my reflections and get my BASES halfway thing sent off, so I guess it's in cycles with me, really, depending on other work. (Jimmy T6)

With respect to time constraints, other participants referred to the paperwork aspect of BASES SE as being the biggest challenge, as described by both Katya (e.g., "My experiences since last I spoke to you? Loads of paperwork to do, and I think it's the biggest and most time-consuming experience" T12) and Jenna (e.g., "I still find that a little bit difficult, and in terms of, with the SE programme, because you've got so much paperwork to complete and everything" T6). Here, the term 'paperwork' is used to describe the 'evidence' required for BASES SE. However, Gary elaborates further on what may indeed be going on, suggesting that the production of *evidence* of RP engagement that is the time-demanding aspect rather the *engaging* in RP itself. He stated:

> You can see the value of it, and how it improves your work, and I suppose it's that – I know I'm doing it because it's changing the way I work, but to satisfy the reviewers,

> the supervisor and the process, I'm not quite doing that. So, you know you're getting value and worth from it (RP), but there's that extra hurdle, and it's a case of, am I going to do this between the hours of two and four in the morning? Probably not. (Gary T6)

Several participants also referred to issues in supervisor support that affected their RP engagement. One example was based on a lack of contact with their supervisor, which was either infrequent or non-existent. For two participants in particular, such issues led to them changing supervisors within the BASES SE process. Esther explained (prior to switching supervisor), "I don't think I've had as much (support) as I would like" (Esther T6). Perhaps related to the issue of access or contact, another highlighted issue by several related to supervisors holding multiple roles, for example, also acting as the participants' PhD supervisor or line manager. For example, Julie stated:

> I didn't really get much support in my first half of SE. I sent my halfway competency profile to them a year in, and I never got any feedback on it, so that kind of triggered me to say I need a little bit more support with this. The meetings were more PhD-based meetings, even though they would say, "We're going to talk about BASES", and they never really did. We never went through any case studies or anything. (Julie T6)

Another area described was the lack of priority on RP within BASES supervisory support, where other areas of SE were perhaps deemed more important, exemplified here again by Esther who stated: "The thing I've found with supervisors is that my reflections get neglected, and other things crop up first, because obviously you're paying for time, and there's only a certain amount of time" (Esther T6).

A further barrier to RP engagement related to negative feelings and emotions associated with the process. For example, some described RP as a vulnerable or uncomfortable exercise, which for some related to others' having access to view their reflections. These worries for some, affected the process of RP, expressing worries about the presentation or standard required in their reflections, for example:

> I think I'm just one of those people, whenever I do any sort of written work that I know is going to be seen by or go towards something that I'm working towards, I think I automatically worry, because I think I should you should give it in a certain way. You put your academic head on rather than reflection head, and I think I need to put a bit more reflection head on, and sort of take out the academic head a little bit more. (Jenna T6)

However, others reported experiencing negative emotions even in cases where nobody external would or needed to see it. For instance, several described situations where they simply did not want to reflect because of the discomfort it brought, as exemplified here by Jake:

> Something happened, and I didn't really want to reflect on it. It made me look like a bad practitioner, and I didn't really want to reflect on it. I just knew I had to. It was one of those things that, I have to get it down on a paper. It'll look good for the BASES, but it also will help me never do that again, if it's on paper, whereas if you do something – not bad, I suppose, but if you don't act on something, and you don't formally, some

> way, reflect on it, then are you more likely to...? Is it more likely to occur again? I think it probably is, so that's why I decided in the end, just get it down on paper, just write it down. It's done, it's done, you know not to do it again. (Jake T6)

Although barriers were highlighted, throughout the discussions with delegates over the longitudinal research period coinciding with participants' SE, several facilitators to individual RP engagement were also identified. One of the most frequently reported areas of facilitation was supervisor support, where specific subthemes focused on the supervisors' RP knowledge and/or experience, the frequency of contact or ability to access support; and being challenged (by questioning) on their experiences.

Some participants highlighted that their BASES supervisors were experienced or knowledgeable in the area of RP which consequently resulted in them feeling supported in this area and often RP was observed as a priority aspect of the SE process. For example, one participant had a supervisor who had previously delivered the BASES RP workshop, describing that:

> I think I'm quite lucky in that I had a really good BASES SE supervisor, she actually delivered the reflective practice workshop when she worked at [university name]. So, she was really hot on what to include within it, so when I handed in my halfway report a couple of summers ago, getting feedback from her was really useful because it gave me insights… she was able to kind of guide it in the right direction. (Peter T6)

However, other supervisors' RP experience was based on leading professional practice modules where RP was a key part of the learning and assessments. Describing his supervisor, Eddie explained:

> They actually delivered the core module, professional practice of the master's, so it was well-structured, but also engaging and encouraging about reflection, so there was a good educational aspect to it. [They were] also diligent with me in conversations, you know, don't forget your reflection, Eddie, and the prompting. (Eddie T6)

Other participants positively highlighted regular or frequent contact with their supervisors, which in two cases was driven by the supervisor themselves. An example of this was highlighted by Julie who also suggested that meeting with her supervisor every month was more helpful than the written RP as she had done so most frequently throughout her SE period (note: Julie had changed supervisor part way through based on conflicts of interest with PhD supervision and lack of support):

> My supervisor [name], he's really, really, really good, and he makes sure that I meet him, so that I can talk, because he says all that you do is like you crack on with all these different things, and actually you never stop and take a minute to think where you're at. So he makes sure, like every other month, that I meet him, and we sit through like random cases or just anything in general, and I think that's more helpful than me just writing things down now. (Julie T12)

Another participant explained that he met his supervisor less frequently, but that they were still influential with his RP engagement, which was not from a 'how to do RP' perspective (as

he got this from the RP workshop) but using more of a target setting or monitoring approach. Jake described his supervisor as:

> A big driver behind it (RP)... I don't really see him that much. I see him probably once every two or three months. He pretty much just lets me get on with what I want to do, but it was after the last [halfway] submission, we sat down after we got feedback and he said, 'Right, this is what we need to do. Need to do more reflective practice', but again, I didn't quite understand what I needed to do, until obviously the (RP) workshop. So, he's been more, right, your skillset's fine, it's just, we need to get you to be able to make sure you reflect, become a better practitioner that way. So, he's kind of prioritised things at different points along the SE pathway, whereas at the start it was, get the hours, get the skillset, get a few of the reports done, get the competencies ticked off, then the second half was very much, okay, let's see, how did you do? Why did you do something? How did you feel? He's been a big influence, definitely. (Jake T6)

As mentioned here by Jake, another key area of supervisor support in RP engagement related to being challenged or questioned (whilst still supportive). A key example of this in action came from Shane, who's supervisor challenged him by critiquing one of his BASES reflections which described his applied practice as "all pretty positive", but his supervisor questioned whether this was actually the case. Shane responded to being challenged by his supervisor about his RP stating that:

> If I hadn't had that conversation with [supervisor name] this week, if he'd just bypassed that feedback, I wouldn't have been able to have this conversation. We'd have been having completely different conversation. I'd have been telling you it's all fine, it's cracking, yes, I'm pressing on, and really, I'm not. And again, I got that, like that paper that James [Morton] has written, that sort of really made me think, and look at it from a different perspective as well. So I guess the barrier there, the ability to actually engage with yourself, it's probably access and contact with somebody else who you can actually tease the things out with. (Shane T6)

On a similar note, another facilitator to RP engagement was feedback on RP, either from a supervisor (as also highlighted above) or from others within the BASES SE process. These included BASES SE reviewers and myself who offered feedback on submitted examples of RP as part of the research process. Such feedback was highlighted as providing similar messages when obtained from multiple sources, as suggested here by Esther who stated that receiving feedback from her supervisor, reviewer and myself was:

> Really helpful, because they (multiple versions of RP feedback) stay in sort of a theme, so it's just reiterating a similar message, but also hearing slightly different perspectives or wording it (feedback) differently. I think hopefully my reflections from now on will be slightly different. (Esther T12)

This also builds on a previous interview with Esther at T6 where she highlighted that she wanted to obtain feedback on her reflections which at that time she had not yet received (a change in supervisor had occurred between the workshop, T6 and T12). Furthermore, a suggestion was made by two other participants that more feedback on RP outside of the supervisor-supervisee dyad would be beneficial, as exemplified here by William:

> I think it would be good, as well as your supervisor, if there was someone that you could speak to or bounce ideas off, or even send in a piece of (RP) work to say, 'What do you think about this? Is this the kind of thing that fits the structure? Is this the kind of thing we should be doing, or is this completely not appropriate, and should I be looking at it in a different manner? So, yes, I think just being aware of who you can go to, to get a bit of feedback. (William T6)

Another highlighted facilitator to RP engagement was seeing examples of RP, specifically those referred to and provided in the workshop, as this contributed to the participants' awareness and understanding of the depth of RP. The examples provided were from Moon (2004), where four examples of reflective writing were provided, each to a varied amount of reflective depth (e.g., descriptive to more critical). Peter highlighted this particular activity as being the most helpful aspect of the RP workshop, with others describing a subsequent increase in their awareness in the RP depth that is possible: "It (The Park) made me think like, "Oh, right, ok, maybe I need to put a little bit more kind of analysis in, rather than just describing" (Julie T6). However, another example of RP that was facilitative was described by Shane, who highlighted that a published self-reflective journal article by a practitioner in the same discipline (Morton, 2009) was also helpful for his own RP engagement. He described:

> I read a paper by James Morton, the 2009 one, where he'd done that big thing about his teaching. I was a bit goose bumpy after it, and I've been trying to do something similar this week, just to put with my halfway portfolio, just to give it a bit more character. I went to corners of my mind I didn't know I had with it…. I think reading James' paper has been like a real eye-opener, and just seeing how sort of humble and honest he was with things. (Shane T6)

From a more internal or personal perspective, a key facilitator appeared to be the participants' ability to develop and utilise an individualised approach to RP, perhaps indicative of critical thinking and understanding. Some participants adapted or amalgamated existing RP frameworks to seemingly improve their ability to reflect on experiences. Whereas others created their own templates to guide their RP, either based on existing frameworks or to be aligned to certain experiences, for example:

> I've got different ones (templates) for the workshops. So, the workshop one (template) just has the main aims of the workshop, and then how that implicates your practice, so how you're going to put it into your practice or what sort of parts you took away for your practice. So, it's not maybe as in depth as the consultancy one (template), but it is a semi-reflection. (Jenna T24)

Another approach by some was to select key questions from existing frameworks that were recognised as pertinent for reflecting and learning from the experience in hand. An example of this highlighted by two individuals was to focus in on the 'so what' or 'now what' questions of Driscoll's framework, either to draw out deeper meaning or to be more efficient when time is limited, as shown here by Esther:

> I've been trying to make them (my reflections) a bit more concise as much as I can, so sometimes, if I'm short on time or I'm just not sure, maybe I'll write them down or I'll so

> sort of maybe a mind map of things, or sometimes I kind of block them into using the "So what? Now what?" (Esther T24)

An alternative way of individualising ones RP process was to use different RP techniques for different types or levels of reflection. Jake provided a very clear example of his approach which he developed after attending the RP workshop, which was to use the Gibbs cycle for technical or task-focused types of reflection, but for other types of reflection, he recognised that a framework was too restrictive, thus adopting a more unstructured verbal technique which felt more free. He described:

> I'm more selective about what techniques I use, and when, and what for… I like the Gibbs Cycle for when I'm doing physiological assessments. On the other hand, the other stuff I need reflection is for, like, how do I deal with the coach? How do I speak to the coach, athlete? How do I get them to do what I want to do? And, actually, I don't use any framework whatsoever for that. I have definitely found that, just speaking, recording either voice or video, has been much, much greater, because actually it's almost like I'm able to throw out ideas, where I wouldn't be able to be as free if I had a framework. (Jake T6)

**7.5 Discussion**

Given the links between RP and effective practice in practitioner settings, evidence of RP engagement has been a requirement for trainee Sport and Exercise Scientists embarking on a journey towards BASES Accredited status since 2009. However, there is limited evidence to suggest how the RP aspect of this longitudinal journey can be best facilitated. Whilst longitudinal research has been conducted with regard to RP skills (e.g., Knowles et al., 2001, 2006; Kuklick et al., 2015a, 2015b; Partington et al., 2015), these are all based outside of the context of SES and have mostly taken place over short durations (e.g., 12-26 weeks). In addition, the participants' *experience* of RP over time is often overlooked due to the single-design research methods adopted.

Perhaps as a result of the research that has been conducted, and the growing consensus regarding the value of RP in both personal and professional development (cf. Knowles et al., 2014), there have been calls to explore the relationship between the development reflective skills further, as well as exploring links between RP and other constructs, including self-confidence and reflective focus (Knowles et al., 2001, 2014). In support of these calls, chapter three of this thesis presented the argument that little evidence is available to support those responsible for designing professional training programmes with regard to how RP (and its associated skills) might be best developed within practitioner training pathways.

Within phase one of chapter four of this thesis, formative exploration of RP development from the perspective of international supervisors and educators from a sport psychology perspective provided information about how sport psychologists were trained in their respective nations, the role of RP (if any) in their respective programmes, and how it was

developed. Furthermore, the survey conducted in phase two of chapter four suggested that RP developed over time based on participants' experiences at different stages of their career within a SES setting, where indications of facilitators and barriers to such RP development were offered. Finally, in phase three of chapter four, cross-sectional data revealed that participants experienced increased understanding of RP, improved reflective skills, and changed attitudes / beliefs (e.g., increased confidence) after attending the BASES RP workshop. However, the collected data did not provide opportunity for in depth exploration of individual participant experiences including details relating to personal preferences for different RP techniques, motivation to engage, and the possible impact of such engagement. In addition, given that the workshop evaluation data was obtained using pre-existing form, limited detail based on that one experience was available, and subsequent research to examine the longitudinal impact on the delegates beyond the RP workshop as part of the BASES SE process was indeed necessary.

In attempts to address the aforementioned issues with current understanding relating to RP, the present study used a mixed-methods, longitudinal design in order to track the development of RP throughout a SES training scheme / curriculum, namely BASES SE. Triangulation of data, gathered from participants across a period of up to 24 months (beginning immediately prior to participants attending a compulsory BASES RP workshop), identified several key findings relating to the development of participants' understanding of, and engagement in RP.

### *7.5.1 Changes in reflective learning over time*

Throughout the longitudinal period under examination, significant increases in reflective learning (RL) were observed over time. Whilst no change in the RLS score was evident between the pre- and post-RP workshop scores (T0 and T6), significant increases were subsequently observed between timepoints T0 and T12, T0 and T18, T0 and T24, as well as T6 and T12, and T6 and T24. In their validation study of the RLS, Sobral (2005) found significant increases ($p < 0.05$) between start and end scores for only one item (3: "*To what extent have I reviewed previously studied subjects during each term"*) in a population of medical students, whereas three other items (7: *"To what extent have I sought out interrelations between topics in order to construct more comprehensive notions about some theme*"; 9: "*To what extent have I conscientiously sought to adapt myself to the varied demands of the different courses and training activities*"; and 13: "*To what extent have I diligently removed negative feelings in relation to aims, objects, behaviours, topics or problems pertaining to my studies*" - see appendix 6) were found to be significantly higher at the start compared to the end of the timeframe, concluding that RLS over time was temporally stable. Perhaps this is to be expected considering the timeframe used in Sobral's research

was only 15 weeks and no intervention was utilised, therefore suggesting that specific RP facilitation is indeed required to bring about changes in reflective learning. In contrast, such facilitation was evident in the current study which included a specific RP workshop, and thus significant increases in RLS scores over the respective timeframes may well have been explained by this. Chuan-Yuan, Ying-Tai, Ming-Hsia & Jia-Te's (2013) research, which focused on a population of 29 undergraduate physical therapy students, also utilised the RLS to assess the impact of a short lecture about RP and journal writing. The findings revealed significant increases in personal efficacy ($p < 0.001$), but no significant improvements in the total RLS score. Such findings suggest that increases in confidence may be more easily observed in a short period or at the start of a learning journey (e.g., BASES SE), whereas changes in learning behaviour and quality of reflection (as indicated by the RLS) may take longer. This notion supports the findings of the present study where no change in the RLS score was evident between the pre and post RP workshop RLS scores (over 6 months), but significant increases were subsequently observed over a longer timeframe. In addition, and in agreement with findings from Chuan-Yuan et al. (2013), perceived confidence scores within the present study did however significantly increase between T0 and T6, suggesting that confidence is more easily influenced than reflective skills or behaviours, which perhaps take more time to develop. Similar findings were reported by Wessel and Larin (2006) who found no significant changes in reflective levels but did see increases in physiotherapy students' confidence levels following a brief RP training intervention. Additionally, within sport settings, research has also reported that even though no changes have resulted in performance outcomes as a result of RP engagement, positive perceptual changes were still evident such as increased motivation, improved preparation and awareness (Koh et al., 2017; Tan et al., 2016). Therefore, given the potential delay or longitudinal timeframe for the development of reflective learning to occur, the BASES RP workshop should be attended early in the SE period (e.g., within the first six months) to provide ample time for RP skills to be facilitated whilst still under supervision, which would also increase the likelihood of increased effectiveness as a trainee practitioner earlier than if the workshop was attended later in the SE timeframe.

### *7.5.2 Changes in habitual action over time*

The present study found significant decreases in habitual action over the research period as measured by the QRT scale, where mean habitual action at T6, T12 and T24 was significantly lower than the mean habitual action observed at T0, measured immediately prior to completing the BASES RP workshop. Similar findings were observed by Skinner, Hyde, McPherson, Crockett, O'Connor and Breheny (2016) who also reported decreases (albeit not significantly) in habitual action over time between year 2 and year 4 in undergraduate

physiotherapy students. Habitual action has been defined as the least analytical level of thinking (e.g., Kember et al., 2000) and is typically viewed as 'non-reflective' (Wong et al., 1995). Other studies have previously reported an association between habitual action and a surface learning approach (e.g., Leung & Kember, 2003; Phan, 2007), where the main objective is to reproduce information without additional analysis (Murphy & Tyler, 2005). Phan (2007) further defined habitual action as "an automatic mechanical routine and procedure (which) is formed from a surface learning approach, as no attempt is being made to understand the contents acquired" (p. 800). Furthermore, Gahnizadeh (2017) reported that habitual action was negatively correlated with critical thinking, a skill found to be significantly and positively correlated to metacognitive awareness (Çakici, 2018). Therefore, in relation to the present study, it could be argued that the observed significant decreases in habitual action may have been coupled with increases in critical thinking and awareness over the same time period. Support for this was evident in the qualitative data emerging from the current study, which explored participants' RP experiences during BASES SE, where both increases in awareness and critical thinking were described. For example, participants reported increased awareness of techniques and processes after attending the BASES RP workshop (from six months onwards), and that engaging in conversational RP techniques, either alone or with others after the workshop also helped to increase participants' awareness by either "sounding something out" which helped to process information (akin to a think aloud protocol; cf. Whitehead et al., 2016) or by hearing others' perspectives on matters. Increased critical thinking throughout BASES SE was also evident in the wider breadth or level of reflection that took place over time, allowing for deeper exploration of the wider implications of one's actions or decision-making processes. The focus of reflection over time also became less technical (e.g., focused on "what works") and more focused on the needs of others (also observed in Wessel & Larin, 2006), and/or ones values, beliefs and morals, which are thought to be indicative of moves towards critical reflection (Mezirow, 1990).

The findings of the present study identified a link between habitual action and confidence (or self-efficacy), where significant decreases in habitual action coincided with significant increases in confidence and competence over a longitudinal period. A previous study from Phan (2007) involving university students provided evidence demonstrating a negative effect of self-efficacy on habitual action (→: $\beta = -.31$), but also positive effects of self-efficacy on reflection (→: $\beta = .38$) and understanding (→: $\beta = .43$). More recently, Phan (2014) also suggested that self-efficacy could facilitate engagement in higher order cognitive processes involved in reflection such as critical thinking, and based on their findings, argued self-efficacy to be an antecedent of reflective thinking. Such findings have been supported by research that has argued that higher level learning (or reflection) requires confidence in order to be critical, to be vulnerable, to ask for feedback, to evaluate one's own performance and to

withstand social pressure (van Woerkom, Nijhof & Nieuwenhuis, 2002). Furthermore, Phan (2014) suggested that positive learning experiences help to reinforce self-efficacy beliefs which support higher order cognitive processing, including critical or reflective thinking, suggesting the reverse may also be true whereby positive learning experiences can further enhance self-efficacy or participant confidence.

### *7.5.3 Changes in confidence over time*

Increased confidence was also a finding identified in the participant interviews in the current study. For example, prior to attending the BASES RP workshop, participants reported a lack of confidence towards RP, both regarding their understanding and ability to engage. This was also highlighted by Cropley et al. (2012), where participants from a coach education setting reported a lack of confidence in their understanding of reflective practice, which contributed to limited engagement with the process, potentially indicating a negative learning experience. However, in the present study, upon completion of the BASES RP workshop, participants reported increased understanding and confidence towards RP and their subsequent practice, providing examples throughout (e.g., one stated that reflecting on positive experiences rather than focusing on negative helped to increase confidence). Such findings suggest that the BASES RP workshop was perceived as a positive learning experience which helped to increase delegates confidence to use and engage in RP. This is further supported by the significant increases between T0 and T6 in perceived confidence and research highlighting the value of educational RP workshops as ways of improving RP understanding and thus confidence to reflect (e.g., Cropley et al., 2012; Whitehead et al., 2016). In addition, such increases in confidence have been reported elsewhere as indicative of transformational learning (Springfield, Smiler, & Gwozdek, 2015). Furthermore, the interviews conducted in this current study also provided an indication of the facilitating factors that may contribute to such positive learning experiences and confidence to reflect. These included the support of others, such as the BASES supervisor, peers or family/friends. Previous literature has reported significant correlations between positive perceptions of RP and confidence in RP ability (e.g., Rees & Sheard, 2004), and that RP perception and engagement is influenced by one's perception of the facilitator (Jindal-Snape & Holmes, 2009; Paget, 2001). Others further reported that someone in such a role (e.g., a mentor or supervisor) should be caring and supportive, committed, a competent reflective practitioner themselves, sensitive to the learners' needs, and should have the appropriate skills to be able to deal with the strong emotions associated with RP (Liimatainen et al., 2001; Paget, 2001). In the present study, participants shared a positive view of the facilitator/s delivering their respective BASES RP workshop when asked about their experiences, which also supports

the findings from chapter four where equally positive descriptions were provided of the BASES RP workshop deliverers according to post-workshop delegate evaluations.

Another factor thought to increase the *confidence to reflect* is guidance or feedback on ones RP. Some participants in the current study reported instances of not receiving feedback on their RP during BASES SE, which left them feeling unsure of whether it was "right or wrong" and thus not confident in their reflections, especially when this was coupled with submitting them as evidence of RP engagement for BASES. Previous research has described issues with RP for assessment purposes and the perceived discomfort, as well as need or requirement to write 'in correct English' (Jindal-Snape & Holmes, 2009). Regardless of such issues, Findlay et al. (2010) stipulated that assessment was indeed important in the development of reflective writing skills and that feedback is needed, which could counter some of the aforementioned concerns. Feedback from others could be verbal or written, both of which align with Bandura's self-efficacy theory, in the creation of positive learning experiences, thus developing self-efficacy beliefs and increased higher order reflective thinking (Phan, 2014). Providing feedback was also a recommendation in Hayton, Kang, Wong and Loo's (2015) research, in which they suggest that feedback could have enabled further critical reflection in their own participants. The present study in contrast, did provide feedback to participants on their submitted written reflections, thus arguably encouraging participants to reflect at a deeper level (if utilised). Whether feedback was received from the researcher in the present study, or from a supervisor within the BASES SE process, it was still deemed as facilitative, helpful and positive. Specifically, participants reported that feedback on their reflections resulted in a change in their approach or process, and in the case of multiple feedback sources, offered reiteration of a similar point or provided a different perspective. Some participants even described dramatic shifts, new perspectives or ways of being based on the feedback they received on their reflections, which aligns with Mezirow's transformational learning theory (Mezirow, 1991; 1997) and suggests that critical reflection can be encouraged through providing feedback.

Previous research has also provided support for increases in confidence, through using different RP techniques, including: reflecting with others (e.g., Knowles et al., 2007); written reflection (e.g., Glaze, 2001); and/or verbal reflection (e.g., Platzer et al., 2000a). The present study found that participants reported engagement in different techniques of RP throughout BASES SE, with some describing their engagement positively which aligns with Phan's (2014) research which reported that positive learning experiences contribute to one's confidence or self-efficacy beliefs. Furthermore, increases in confidence could increase the likelihood of further engagement in learning experiences. Therefore, it could be suggested that negative learning experiences may diminish or hinder the development of one's confidence.

In contrast however, some negative experiences of RP were also described in the present study, feasibly resulting from feelings of isolation when reflecting alone, the perception of RP being time consuming, experiencing feelings of worry, anxiety and vulnerability when sharing personal experiences, or simply not understanding the importance or value for RP which could easily result in further engagement issues. These were also highlighted in Er, Ming, Keng and Nadarajah (2018), who, in contrast to the present study, reported no change in participant confidence levels after completing a reflective portfolio. Reasons offered for such a finding included the students' perception that engaging in a reflective portfolio was time-consuming and stressful, therefore suggesting a negative RP experience. However, in addition, the authors described the portfolio (which was also a formal assessment) as "self-directed" which could also suggest a lack of support or facilitation occurred, which has been reported elsewhere as critical for learners starting out with RP (Duffy, 2008).

The link between reflective thinking and confidence were confirmed in the present study where a regression analysis found that the reflection subscale of the QRT was a significant predictor of perceived confidence and competence to reflect in the research participants. This supports the inference posed by Phan (2014) which suggested that "critical thinking could serve as a source of information to enhance students' self-efficacy beliefs for academic learning" (p. 100) linking the notion of critical thinking to reflective thinking as they are both defined as higher order cognitive processes. Therefore, such a measure as the QRT could provide an indication of learners' confidence and competence to reflect, which could be useful in determining changes over time. Whereby previous research has undertaken complex statistical analyses (e.g., Phan, 2014), or relied upon lengthy and time-demanding participant interviews (e.g., Liimatainen et al., 2001) to explore the constructs or skills relating or facilitating RP, a self-report measure could offer a far more accessible option for assessing or exploring such an important factor that can influence RP engagement and deep learning strategies. For example, this could be used to plot development over time within the supervisor-supervisee process within BASES SE, providing the supervisor with information about changes in confidence and competence levels, but also for supervisees to use in exploring their own progress over the supervised period. Additionally, such a tool could be used both prior to and upon immediate completion of future BASES RP workshops to establish shorter term changes in perceived confidence and competence levels to use RP than the six-month follow up undertaken in this study, which would provide further course feedback/support as to the impact of the workshop itself regardless of other contextual factors that may impact outside of the workshop setting.

### *7.5.4 Other aspects of RT over time (e.g. understanding, reflection, critical reflection)*

The present study did not observe any statistically significant changes in understanding, reflection and critical reflection on the QRT over time. However, Skinner et al. (2016) did observe significant increases in both the understanding and reflection subscales between two timepoints (end of year 2 and end of year 4 on a undergraduate healthcare course), which linked to an explanation offered by Lethbridge et al. (2013) who, referring specifically to the QRT, suggested that "as more engagement in the understanding, reflection and critical reflection dimensions occurs, the use of the habitual action aspect diminishes" (p. 321). A potential reason for no changes in the understanding subscale could be that levels of understanding of BASES SE were already high and did not have the opportunity for further increases. For example, the mean score for understanding as measured by the QRT across participants as a group, which included questions about *understanding course content* and having to *continually think about the course material*, remained at 16 or 17 out of a maximum of 20 over the whole longitudinal period, displaying no significant changes. This further inspection of the questions in this subscale suggests that an increase over time is not likely to occur because the questions focus on the participants' perception of the requirement for understanding on the course being completed, which in this case is BASES SE. Therefore, it could be assumed that such a score is expected to be both high and stable over the course duration given the need for delegates to understand concepts, materials and content and the continual thought required in doing so.

Whilst the quantitative measures did not reveal any significant changes on the above subscales of the QRT, exploration of participants' experiences of RP prior to the workshop compared with post-workshop experiences, and subsequently throughout BASES SE did reveal some changes over time with regard to understanding. Data suggested that attending the BASES RP workshop improved participant understanding of RP in several ways (based on comparing pre and post workshop perceptions of RP); an increased understanding of the value and importance of RP was described, as well as increased understanding of the benefits, as well as the RP techniques available to use, which for the majority, were higher in number than their original (pre-workshop) perceptions. Furthermore, subsequent discussions revealed that involving others in the RP process seemed to help to improve participant understanding by way of seeing other perspectives or increased or new knowledge either through discussion or receiving feedback. This aligns theoretically with the unconscious incompetence model (cf. Reay, 1994; McKimm & Swanwick, 2009; Launer, 2010) where movement from unconscious incompetence to conscious incompetence (or even further to conscious competence) may have indeed taken place. As well as describing an increased understanding of RP processes and techniques, the qualitative data also suggested that increased understanding was an outcome of RP engagement. For example, several

participants described an increased understanding of themselves and of others (e.g., clients) that they worked with or supported as a result of engaging in RP, which again suggests a shift in perspective had taken place. Cropley et al. (2012) argued that opportunities to develop RP understanding (e.g., definitions, purposes and processes) must be provided in order to reduce the often-reported negative experiences associated with engagement when understanding is limited (e.g., anxiety, worry, discomfort). In addition, confounding factors or barriers to effective RP (e.g., the view that RP is time-consuming) could be alleviated with an increased understanding of the concept (Cropley et al., 2007). Therefore, it could be argued that such an opportunity to increase RP understanding was provided through the BASES RP workshop and deemed effective in doing so based on participant responses. Further increases in understanding (both process and outcome) took place throughout BASES SE, likely to be as a result of working with or being supported by others (e.g., a supervisor), receiving feedback, or experiencing the benefits of RP engagement first hand.

### *7.5.5 Levels of written reflection over time*

Contrary to other studies within a sport setting (e.g. Kuklick et al., 2015b; Stoszkowski & Collins, 2014a), the present study did not observe any statistical change in the levels at which the participants reflected at over time (see table 7.7). In Stoszkowski and Collins' (2014a) research 23 out of 26 undergraduate sports coaching students increased their level of written reflection from semester one to semester two, although the statistical significance of this was not reported. In a similar sports coaching context, Kuklick et al. (2015b) reported statistically significant increases in written reflective level, this time over a period of 12 weeks. In exploring why such increases in written reflection level were not observed in the present study, several methodological and contextual differences must be considered. First, both Kuklick et al. (2015b) and Stoszkowski and Collins (2014a) utilised very prescriptive or uniform research designs which may have contributed to the different results to the present study. For example, the data analysed for levelness in Stoszkowski and Collins (2014a) formed part of a formal assessment, where certain caveats were placed on participants (e.g. a minimum of 15 entries on the reflective blog were required) thus influencing RP engagement. In addition, within the same study a specific RP framework (Gilbert & Trudel, 2001) was recommended to the participants to be used, and support or facilitation took place on a weekly basis in the form of taught workshops (e.g. about coaching theory and pedagogy), individual tutorials, and tutor feedback on the student blog entries. The coding system used to assess reflective level was that provided by Hatton and Smith (1995), which also contrasted to the analysis framework utilised in the present study, thus providing a possible explanation for variance in findings.

Kuklick et al.'s (2015b) study also linked to a formal assessment within a student population, but compared to Stoszkowski and Collins (2014a), the research period was much

shorter at only 12 weeks in duration compared to full academic year. Weekly online structured prompts (or questions), grounded in Schön's conceptualisations of RP, were provided to students over the 12-week period and subsequently used as an intervention to explore changes in reflective level between two written reflective pieces completed at week 5 and week 12. Incentives to engage in the intervention / online prompts were used in the form of a prize draw and extra assessment points / credits for positive engagement.

Whilst offering knowledge about increasing reflective levelness, both Stoszkowski and Collins' (2014a) and Kuklick et al.'s (2015b) studies are not without criticism. For example, both used specific structures (e.g., Gilbert & Trudel, 2001, and prompts grounded in Schön, respectively) in guiding the participants' reflections which although resulted in increased RP levels, has not always been reported as positive. Some studies pertain a view against a 'one size fits all' approach suggesting that some individuals can feel constrained or limited by using certain frameworks (e.g., Driscoll, 2007; Johns, 2004). In addition, such lack of choice or autonomy has implications for participants' motivation to want to engage in RP beyond the need of an assessment. The present study attempted to account for this in allowing participants to reflect on areas of their choice and using their own desired or preferred reflective process. The only instruction given was that a written method was used and what was submitted was akin to the type of reflection typically being engaged in at the respective time. However, the qualitative exploration of RP experiences suggests that not all participants were able to *effectively* engage in written reflection compared to verbal or shared RP techniques, and as such the data collection approach could have disadvantaged some participants in achieving higher levels of reflection. This notion of ability suggests that reflective skills are required to be able to ascertain higher levels of RP, which is supported by Cropley et al. (2012) who described RP as a *complex process* involving the *whole person* (e.g., emotions, cognitions, behaviours) and as a result not everyone is able to reflect at the same level in the same way. Although this is a potential methodological criticism, the advantage of qualitatively exploring the individual and contextual factors involved in RP engagement is indeed a methodological strength which has not previously been investigated. Such a methodology builds on the gaps revealed in the aforementioned studies (e.g., Kuklick et al., 2015b; Stoszkowski & Collins, 2014a) exploring level of reflection in a sports practitioner context.

Exploring the reflective level literature outside of sport, studies by Liimatainen et al. (2001) and Findlay et al. (2010) offer additional evidence of examining reflective levels longitudinally over a longer period of time that is more in line with the present study's timeline. For example, Findlay et al. (2010) conducted a three-year longitudinal study of radiation therapy students' reflective journals. A main objective of the study was to validate a new assessment tool/rubric to judge levels of reflection within students' journals. However, in doing

so, the study also did not find any significant changes in reflective level over time across a three-year period. A suggestion for this was that no RP intervention was included but was indeed recommended in the authors' conclusion. Furthermore, all students engaged in written reflection, which as suggested by the present study, does not always align with individual preference and/or ability. In contrast, Liimatainen et al. (2001) did report increases in reflective level over an equal three-year data collection period. Authors here reported that 50% of their participants increased their level of reflection to the highest category (e.g. level 5-7 based on Mezirow, 1981). The methodology of Liimatainen et al. (2001) analysed data transcribed from stimulated interviews as opposed to written journal entries in Findlay et al. (2010). In addition, the interview questions themselves were based on Johns' (1994) reflective framework and combined with video recordings of students themselves in practice. A more facilitated methodology arguably contributed to deeper levels of RP by improving memory recall (e.g., replaying a video of oneself 'in practice') and the prompting of a facilitator (e.g., the interviewer) using questions based on an established RP framework (e.g., Johns, 1994). This methodology aligns with other research that advocates the value of RP facilitation, through questioning, verbal and/or shared RP techniques and using RP frameworks (e.g., Koh et al., 2015; Woodcock et al., 2008). Relating to the present study, some participants highlighted that the semi-structured interviews they engaged in for the study itself were more like reflective conversations, where one or two specifically highlighted that as a result, they had developed a new perspective on something, or had recognised an increase in their awareness. Such a finding could be explained through the unconscious-incompetence model where the interview (through questioning and prompts) could have encouraged participants to think or reflect more deeply on their experiences, and as a result, brought the unconscious into the conscious, signifying increases in awareness. Similarly, this could also be explained in conjunction with Mezirow's (1991, 1997) transformational learning theory, where the interview/questions from the researcher led to the participant experiencing a disorientating dilemma, and through a shared or facilitated process, the participant was able to explore options for new actions. In addition, the one-to-one research interviews provided an individualised learning opportunity which also is said to contribute to transformational learning, which requires critical reflection in order to take place (Illeris, 2007).

Finally, although based on previous literature focused on reflective levels there may be a natural tendency to criticise the fact that no significant changes were observed in mean levels of written reflection over a longitudinal period in the present study, such a finding may indeed be more indicative of the practitioner development context and perhaps the issue of reflective level hierarchy requires further consideration. It could be argued, for example, that the level the participants reflected at in the present study was enough to satisfy their individual needs at that time (e.g., they didn't *need* to reflect at a higher level). For example, if an

individual's written reflection example were based on practicum experiences where issues of efficacy of intervention were most pertinent and lie at the heart of reflection, then critical reflection in this case is (potentially, or arguably) not required. Furthermore, considering the varied contexts in which participants involved in BASES SE find themselves, not all situations afford the opportunity for critical reflection to occur. Therefore, rather than expect all individuals to (strive to) ascertain critical levels of reflection in all situations, when the literature contests that such a level may not be possible for some individuals, perhaps an alternative approach is to consider the *purpose* of the reflection alongside the reflective level achieved or required. Linked to this, Knowles et al. (2012) proposed that "different circumstances are likely to require and engender different types of reflection" (p. 456), and thus, such findings could be considered in future iterations of the BASES SE scheme to allow learners/trainee practitioners to be exposed to varied situations that may better elicit variety in RP level. For example, rather than the current guidance which stipulates "provide evidence of engagement in reflective practice", a recommendation could be to provide examples of RP which demonstrates engagement for a variety of specific purposes (e.g., to increase self-awareness, to increase understanding, to demonstrate learning, to facilitate coping or emotional control).

### 7.6 Summary

In summary, the present study confirmed that RP is a complex, highly individualised and context-dependent process. In addition, the RP workshop under scrutiny had a positive and significant impact on participants' perceived confidence and competence to reflect. This was coupled with significant decreases in habitual action (HA) or 'acting without thinking' which also suggested increases in awareness. Qualitative data further illuminated increases in participants' awareness and perceived understanding of RP.

Furthermore, significant increases were also observed in reflective learning over time from 12 months post-workshop attendance, suggesting that such behaviours, underpinned by reflective skills, may take a longer time to develop. Level (or depth) of written reflection however did not statistically change over time, but when explored at the individual level, it was suggested that the chosen focus or content of the written reflection could indeed have limited the ascertained reflective level. Therefore, if demonstration of deeper or more critical reflection is a desired outcome a sports practitioner then more guidance is needed for both the trainee practitioner, as well those supervising or overseeing the learning process.

Finally, participants described varied experiences of RP throughout their period of BASES SE beyond the RP workshop. One area which may have significantly contributed to the respective experience was the type of facilitation received throughout the process. Some described positive facilitation experiences (e.g., feelings of being supported, receipt of feedback on their reflections, provision of opportunities to reflect, being questioned or

challenged on their experiences and/or reflections). Others described a more negative view of facilitation (e.g., feelings of isolation, no time allocated for RP in supervisory meetings, no feedback). Therefore, more guidance is required for those in facilitation roles in order to best support the RP of others which does not currently exist, and to ensure that the positive outcomes and benefits of RP engagement are accessed.

# Chapter Eight

# Synthesis of Findings

## 8.1 Introduction

The current chapter aims to summarise the thesis in its entirety which is initiated by a statement of the initial research problem and subsequent aims followed by a detailed summary of key findings and their significance. Further, recommendations for both practice and research and an overall conclusion are offered before and finally in the spirit of the thesis itself, a reflective epilogue.

## 8.2 Research problem and aims of thesis

Despite many decades of exploration and investigation, researchers continue to present RP as a contested concept lacking conceptual clarity (e.g., Cushion, 2018; Fook et al., 2006; Jarvis, 1992). Additionally, researchers often rely on singular methodological and momentary approaches to investigate what is in essence, agreed to be a complex process incorporating 'the whole self' (e.g., Cropley et al., 2012; Knowles et al., 2014). The level of understanding regarding the complex relationship between RP and learning has, consequently, been diluted, which adds further confusion for those seeking to use RP in trainee practitioner settings. Such confusion is specifically evident about how RP is utilised in practitioner settings, its efficacy, its development over time, its definitions, techniques used and the level or depth of RP which are possible (Cushion, 2018; Knowles et al., 2012). Furthermore, within the context of sport, research targeting the utility of RP to improve facets of performance has been dominated by sport coaching (e.g., Knowles et al., 2001, 2005, 2006; Cropley et al., 2012) and sport psychology (e.g., Anderson et al., 2004; Cropley et al., 2007; Knowles et al., 2007), leaving those trainee practitioners within sport sitting outside of these specific disciplines (e.g., other SES disciplines) to have limited guidance and evidence to draw upon. Only more recently have other SES disciplines begun to consider RP, including nutrition (e.g., Martin, 2017) and strength and conditioning (e.g., Handcock & Cassidy, 2014). Despite such confusion within the literature, trainee SES practitioners embarking on BASES SE are still expected to "understand the value of reflection on practice and evidence engagement in the process" (BASES sub-competency 5.4). Therefore, the aims of this thesis were to:

1. Critically explore (current) knowledge, understanding and engagement in RP in the domain of sport.
2. Examine the international landscape of RP within educational and professional development settings in sport psychology.
3. Explore the RP experiences of BASES SE supervisors and reviewers in a UK SES context.
4. Evaluate the impact and role of the BASES RP workshop.

5. Longitudinally plot the development of RPs in trainee sport and exercise science practitioners.
6. Provide recommendations for research, practice and professional training frameworks in sport and exercise science regarding RP.

### 8.3 Summary of key findings and significance of the research

Following a programme of systematic research (over nine years in total with eight years active on the programme) that included meta-syntheses of published literature, semi-structured interviews (cross-sectional and longitudinal), an online survey, questionnaires and document analyses, the original findings of this research project revealed that:

1. Despite 20 years of research, a lack of understanding exists with regard to RP, both within the published literature and in professional development settings in sport, which impacts subsequent RP engagement
   - *Many published articles use the term 'reflective practice' or 'reflection' without actually describing, using or discussing these processes;*
   - *A lack of RP understanding is a barrier to RP engagement and can lead to negative outcomes (e.g., increased anxiety, lack of motivation), whereas understanding RP can improve RP engagement and lead to positive outcomes (e.g., increased self-awareness, confidence, more effective practice)*
   - *A lack of effective training exists for those in roles (e.g., supervisors and reviewers) expected to support and / or verify RP engagement in trainee practitioners;*
2. RP engagement is a highly complex, individualised and context dependent process
   - *Levels of RP are influenced by individual preferences for mode of RP (e.g., written, conversational, shared or individual) and the focus of the RP (e.g., what is being reflected upon)*
   - *Context (e.g. stage of career, professional requirements, time available) influences the mode of RP individuals engage in*
   - *Evidence of RP engagement is incongruent with **actual** RP engagement*
3. Engagement with a specific RP curriculum, in this case, BASES SE, significantly increased understanding, confidence and competence to use RP and reflective learning, as well as decreased habitual action when compared to pre-curriculum data in a sample of trainee Sport and Exercise Scientists.
4. The findings are presented in a heuristic model to help guide and facilitate RP engagement

Subsequently, the implications of these findings are that:

- More clarity about the purpose of the RP engagement should be provided by practitioner educators in order to increase trainees' understanding, confidence and motivation towards such engagement.
- The RP process engaged in should be congruent and aligned with the purpose and / or the desired outcome of this RP engagement
- Opportunities to more appropriately evidence RP engagement, especially those which develop intrinsic motives to do so should be offered to trainee practitioners.
- RP should be facilitated and supported by trained and experienced individuals (to alleviate engagement issues). This therefore means that more training on how to support others' RP is needed for those individuals in such roles (e.g., BASES supervisors and reviewers), as well as ongoing opportunities for CPD or support in this area.

***8.3.1 Finding one: A lack of understanding exists regarding RP which inhibits RP engagement.*** The present research provides evidence to suggest that a lack of understanding surrounding the concept of RP currently exists. This was firstly evident chronologically in chapter four where a considerable proportion of articles that were originally included within a systematic literature search were subsequently removed due to not specifically considering the process or outcome of reflection or RP. This is the first research to locate such a finding in sport with empirical evidence, despite other researchers previously alluding to RP being complex and difficult to understand (Cropley et al., 2012; Knowles et al., 2014).

Such a lack of understanding in the literature was further explored within a group of international sport psychology practitioner educators and supervisors (chapter five, phase one), who in their own experiences of supervising others' RP, corroborated that trainee practitioners too were also often confused by the concept of RP. Within this chapter, the typical RP processes used in the trainee practitioner settings were discussed based on common practices in each of the respective nations, where a variety of approaches were often implemented. Some supervisors and educators reported that trainees struggled with the RP aspects of practitioner development, whilst others suggested that RP processes were recommended by a supervisor and were most likely to be uncritically accepted and utilised. Furthermore, the findings also suggested that conceptual confusion about the nature of RP – evident within the literature, also led to increased confusion among trainee practitioners when trying to learn about RP and use empirical evidence to support their learning. Taken together, such confusion resulted in perceived negative outcomes such as increased anxiety and self-doubt when using RP as a development tool and process required to engage in. However, in contrast, there was also evidence of positive experiences, especially when RP was well

facilitated. For example, one participant who supervised full-time trainee sport psychology practitioners suggested that RP was so ingrained in the day-to-day activities of the trainees' schedule, that such confusion did not appear to exist as described in other nations. Whilst this is a positive depiction, albeit isolated, most professional development courses in sport, especially those in the UK (e.g. BASES) do not operate in a similar way. For instance, UK-based trainee practitioners within sport are typically part-time, have other commitments and responsibilities (e.g., research commitments, caring responsibilities, full-time work), and do not have access to RP facilitation from supervisors and peers as described in the previous example.

The reporting of conceptual confusion about the nature of RP and its development was also conveyed by a UK-based sample of (BASES) supervisors and reviewers (see section 5.4). Here, the findings illuminated there was both a lack of training to support or facilitate trainees' RP and that more training was needed for supervisors and reviewers in this area. This is perhaps expected given the majority of participants had not received specific RP training prior to initiating their supervisor / reviewer roles. However, the lack of training is an important oversight given that key characteristics and skills (e.g., being empathetic, caring and knowledgeable about RP) are deemed important to be successful in supporting others' RP (Culver et al., 2009; Knowles et al., 2001; Paget, 2001). In acknowledging the need for training, participants proposed the use of RP exemplars could facilitate their knowledge, understanding and confidence when supervising and reviewing. Such exemplars could be well placed within the RP workshop, or hosted on a website (e.g., within the BASES members area). Further support for the benefit of specific RP training was evident when comparing participants' levels of perceived confidence and competence to supervise / review trainees' RP according to years in the role. Interestingly, those with less experience (denoted in years) in these respective roles were more confident and competent in supporting RP. This is arguably due to the more recent changes and requirements for RP (since 2009) within the BASES SE scheme (e.g., these individuals are more likely to have attended the compulsory RP workshop or have had to demonstrate evidence of RP engagement themselves in order to obtain their BASES SE accreditation). Whilst a direct cause and effect was not possible to ascertain, further research was needed to explore the impact of a RP workshop on perceived confidence (see finding three – section 8.3.3).

***8.3.2 Finding two: RP engagement is a highly complex, individualised and context dependent process.*** The sophisticated methodological approach utilised within this research (e.g., multi-methods across phases and longitudinal mixed methods) provided an account of the reality of RP engagement, which is deemed to be complex, individual and context dependent. These findings contrast those of previous studies that have provided seemingly

overly simplistic accounts of RP and its application (e.g., Doncaster, 2018). For example, an original finding in the present research revealed no statistically significant changes were observed when analysing depth or level of RP over a longitudinal time period (see Ch. 7). This is in contrast to other published literature within sport which had previously reported changes (sometimes significant) in reflective level or depth over time (e.g., Kuklick et al., 2015b; Stoszkowski & Collins, 2014a). The lack of statistical significance found within the present research is important because it highlights the contextual impact on such levelness, and only when this is controlled for, can such increases be observed. For instance, the participants in this research (see section 7.3.3.5) were asked to provide examples of written RP (akin to the way RP evidence is submitted to BASES for review), which also mirrors the mode of RP used in other 'levelness' research over time (e.g., Kuklick et al., 2015b; Stoszkowski & Collins, 2014a). However, these latter studies only reported increases in RP depth within very controlled (often educationally derived) settings, which contrasts the present research whereby trainee practitioners engaged in a more individualised and self-directed programme of development (e.g., BASES SE). Furthermore, the content of the written reflections under review in each of these different contexts were also different. To explain, Kuklick et al. (2015b) and Stoszkowski and Collins (2014a) reported increases in *depth* that their participants were able to reflect at over time, yet the researchers prescribed the focus of the reflections to the respective participants. In contrast, the present research allowed participants to *choose the focus of their written reflections* based on what they felt important, thus providing a sense of autonomy in the RP process. This is significant because previous literature has proposed that different situations are likely to require and prompt different levels of reflection (e.g., Knowles et al., 2012) thus suggesting that the focus of the reflection could (by virtue) limit the level of reflection attained. Therefore, working within a dynamic context such as sport and exercise science, where the foci of RP will often vary, to anticipate a linear increase in reflective level over time is problematic. This original finding has implications for how RP evidence is indeed judged or reviewed, given that previous researchers (e.g., Kuklick et al., 2015b; Stoszkowski & Collins, 2014a) have suggested that RP becomes more critical over time implying that trainee practitioners' RP should also become more critical over time. As a result, reviewers of RP evidence should be made aware that the *focus* of the RP can indeed limit the *level* of RP achieved and should therefore not expect a linear increase in RP level across varying contexts (e.g., such as a chronological competency-based portfolio of evidence).

Whilst no statistical changes over time were observed in the participants' levels of written RP in this research project (see Ch. 7), it was evident, however, that some participants displayed more depth in their reflections via the interviews conducted, which were likened, by some, to be more like "reflective conversations" (see sections 5.3.2.3 and 7.4.3.5). This suggests that different modes of RP (e.g., verbal or written) elicit different levels of RP and

several possibilities of what may have contributed to such a finding are considered. First, the mode of the RP (verbal and / or with another person) may have been more aligned with the individual's preference and allowed them to consequently be more critical. Second, the context / focus of the reflection may have allowed the individual to achieve more depth in their reflections compared to what was focused on in their written examples (e.g., perhaps something more ethically challenging was reflected upon thus enabling critical reflection). Finally, RP was conducted from a *delayed* perspective compared to an *immediate* perspective, where changes (or depth) in the RP may have resulted from the passing of time due to a new perspective being recognised (Mezirow, 1981, 1991). Nevertheless, if deeper or critical reflection is more aligned with transformational learning, then requesting a specific mode of RP as evidence (such as for BASES SE) may indeed be detrimental to the learning process of the trainee for those who prefer, are more able or more confident to reflect differently. This, therefore, has implications for the way RP engagement is evidenced (and subsequently reviewed) and thus more variety and autonomy are called for in providing such evidence.

A further contribution to the RP literature emanating from this research project was that the evidence submitted to represent RP engagement within trainee practitioner settings (e.g., for BASES SE) is incongruent with the *actual* RP that is engaged in. Indeed, analysis of participant interviews in chapter seven showed that a variety of RP methods were utilised within the BASES SE journey, which included: reflective diaries, informal notes, reflective conversations, audio recordings and video diaries. These modes, many of which were introduced to the participants within the mandatory BASES RP workshop, were often utilised as a result of the individuals' context (e.g., time available, opportunities for facilitation, previous experience [positive or negative], or their stage of learning /development). Within the interviews of chapter seven, participants offered examples of RP modes, which, for many, resulted in favourable outcomes (e.g., catharsis, closure, processing of emotions, understanding a situation more deeply, obtaining a different perspective, validation of feelings from others). However, all RP evidence submitted to BASES was that of the prescribed written format, which did not always elicit the same positive outcomes as some of the other RP modes used. Furthermore, participants endeavoured to 'write up' non-written methods (if used), which then placed additional burdens on time, motivation and consequently, hindered their RP engagement. Similar tenets were also reported earlier in the thesis (see section 5.3.2.3) where reflective writing was deemed a boring and mundane activity compared to other techniques perceived to be more positive and interesting (e.g., a reflective conversation). This is significant because if written reflection does not always elicit the deepest possible level of ones' RP, transferring the actual RP engagement into written evidence using a method which may be challenging for could decrease the evidence quality. Therefore, acceptance of different

forms of evidence pre-empted by suitable training is warranted, as observed in section 5.3.2 where one participant (Sarah, based in a non-UK nation) described that a variety of RP modes were encouraged and utilised within their trainees, who consequently were deemed to experience RP in a positive way. The findings from this present research also confirm that not all individuals have the skills to write reflectively (e.g., what's on the paper does not reflect what's in the mind – see section 7.4.3.4) and stipulating this as the only way to evidence RP therefore penalises these individuals, which may hinder future engagement with RP and, as a result, impact future learning experiences and practitioner effectiveness. In summary, individual preference, competence and motivation, factors explored within the BASES SE compulsory workshop, all contribute to RP engagement and its utility and therefore must be considered and appreciated when requesting evidence of this process.

***8.3.3 Finding three: Engagement with a RP curriculum increased understanding, confidence and competence to use RP, reflective learning and decreased habitual action.*** In a further bid to provide an original account of the complex processes surrounding RP engagement over time, a variety of individual variables linked to RP were examined. Specifically, participants' perceived confidence ($p < 0.05$), competence ($p < 0.05$) and reflective learning ($p < 0.05$) – reported within a range of questionnaires, significantly increased over a longitudinal timeframe after engaging in a mandatory RP curriculum (see section 7.4.1.2), findings that have not been observed within the sport literature previously. In addition, significant decreases in habitual action ($p < 0.05$) were observed at both six and twelve months after attending the RP workshop when compared to pre-workshop levels. This RP curriculum was delivered during a workshop (six hours) where the principles of RP were explained, discussed and practiced within a supportive and facilitated setting. A range of RP techniques and frameworks were explored, and opportunities to interact with fellow trainees about their RP experiences were provided throughout the day.

As a result, statistical analysis of participants' perceptions of confidence and competence to use RP was significantly higher after attending the workshop when compared to pre-workshop levels. Such an increase was observed within six months of workshop attendance, and interviews with the same participants substantiated these increases. Whilst a 6-month 'delay' could suggest that other factors contributed to such increases, earlier evaluation data (see section 5.5.3) from delegates attending earlier RP workshops also described increases in confidence and competence upon immediate completion, thus strengthening the workshop impact on these variables. Similar increases in confidence after a short RP lecture were reported by Chaun-Yuan et al. (2013), but the present research extended such findings by observing subsequent significant increases in confidence over a greater longitudinal timeframe. In addition, statistically significant increases in perceived

confidence were also coupled with increases in perceived understanding of RP, as indicated within the participant interviews conducted alongside the questionnaires. This finding is further significant because a lack of confidence in ones understanding of RP has previously been identified to hinder RP engagement (Cropley et al., 2012). Therefore, if such a curriculum can significantly increase trainees' perceived confidence and competence to use RP, then those who engage with the curriculum may subsequently develop more appreciative RP experiences, which is likely to lead to more effective and reflective practitioners (Cropley et al., 2010a).

Participant engagement with the RP curriculum also led to significant decreases in habitual action over time (as measured by the QRT: Kember et al., 2000). Habitual action, defined as "non-reflective" (Wong et al., 1995) was significantly lower at six months and twelve months post-workshop than compared to the pre-workshop baseline data (see table 7.6). Thus, it could be argued that engaging with the workshop stimulated the delegates to become more aware of the RP process. According to Peltier et al. (2006), awareness is stimulated firstly by a learning experience (e.g., workshop attendance), which if deemed important, triggers the process of reflection. This is followed by a second stage of critically analysing the experience – the workshop, in this case, which involves "identifying existing and pertinent knowledge, challenging internal and external assumptions, and seeking possible resolution alternatives" (p. 8). Such critical analysis was encouraged through the interviews within chapter seven, but also was observed within the workshop evaluation data of chapter five (see section 5.5.3), which can, according to Peltier et al. (2006) subsequently lead to new perspectives if cognitive or emotional changes take place, aligned to Mezirow's concept of perspective transformation (Mezirow, 1991). Such a trigger (in this case, the RP workshop) is important as the more self-aware practitioners are, the more able they are to consider broader aspects of their practice within their RP, reflect more critically and potentially uncover blind spots, which may indeed be detrimental should they remain hidden or unconsidered, as underpinned within the unconscious-incompetence model (cf. Reay, 1994; McKimm & Swanwick, 2009; Launer, 2010). Therefore, the original finding that habitual action decreased after attending the RP workshop is significant, because it triggered a reflective process in individuals and made them more aware of their personal thought processes (Peltier et al., 2006) which would most likely not have occurred without attending the workshop (see section 7.4.3.2 for evidence).

Reflective learning also significantly increased over time after attending the designated RP workshop ($p < 0.05$). However, such statistical significance was only apparent from 12 months onwards. This finding is noteworthy because conceptually, increases in reflective learning are indicative of broader or deeper reflective learning behaviours, or arguably, a tendency to be more critically reflective. It is widely accepted that the ability to critically reflect

is challenging, therefore a longer timeframe to foster development and influence behaviour change is expected. Whilst this may appear contradictory to aforementioned levelness arguments, this finding suggests that increases in reflective *ability* develop over time, but that the *context* (e.g., chosen RP technique, focus of RP or time available) can still limit the level of RP actually achieved. The participant interviews illuminated further detail and provided support for this finding, showing that the *focus* of reflection over time moved from being more technical towards being more critical in nature (see section 7.4.3.3), yet, the individual indeed may or may not have the ability and / or awareness to reflect on the situation at a critical level. This is important to understand from an RP evidence perspective where reviewers may expect to see increases in RP level over time, which this finding confirms is problematic and very unlikely. Therefore, what *is* expected to be included and observed over time with regards to RP evidence needs to be clearly stipulated and further clarified within the guidance provided to SES trainee practitioners to ensure positive RP engagement and agreed expectations from all parties. See tables 8.1-8.3 for a more detailed summary of future recommendations.

***8.3.4 Finding four: A heuristic model of RP engagement.*** The findings from the current thesis have been worked into a novel heuristic framework (see Fig. 8.1), which aims to provide conceptual clarity surrounding RP engagement. Overall, the findings of this research suggest that if the *purpose* of the RP at the outset is known and understood, then this can be better aligned with an appropriate *process* of RP engagement, which then may bring about a more desired and/or positive *outcome*. This could enhance positive perceptions of RP and subsequently facilitate ongoing systematic engagement in RP. For example, confidence is thought to be both an antecedent and consequence of RP (e.g., Chuan-Yuan et al., 2013; Phan, 2007, 2014). The model and its constituent parts are discussed further below.

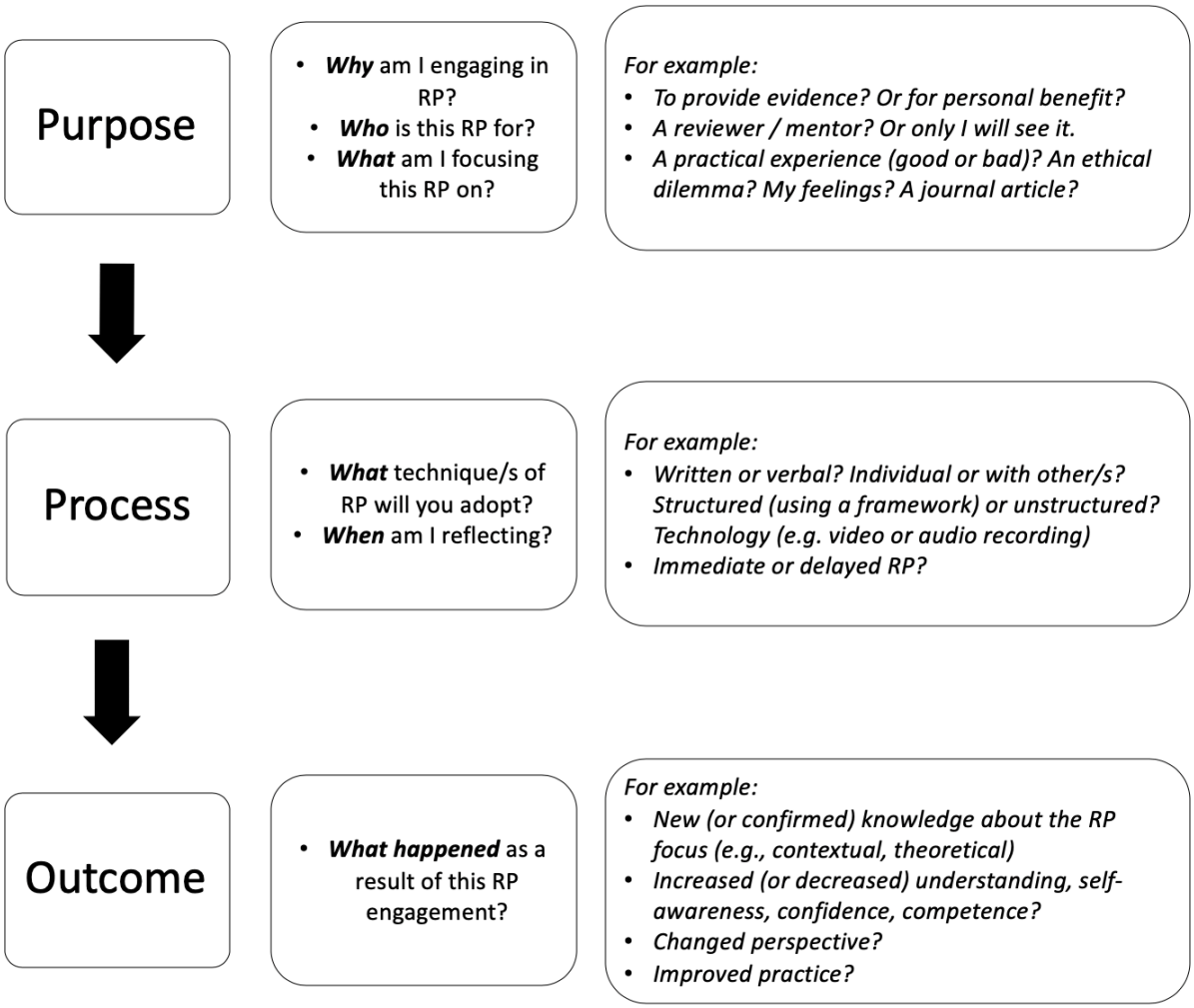


Figure 8.1. The RP engagement model

*8.3.4.1 The 'purpose' of RP engagement*

Three questions are contained within the 'purpose' section of the model, focusing on *why*, *what* and *who*. Firstly, questioning "*Why* am I engaging in RP?" considers the trainee motivation for engaging in the process which the present research is the first within sport to explore. Current findings revealed that trainee practitioners within sport initially engage with RP for extrinsic reasons, whereby the majority of participants involved in the present research were required to engage in RP because it was stipulated to do so by an external body (e.g., BASES; HEI – see chapters five and seven). This is also observed within the RP literature where many studies have focused more on the *outcomes* of RP, often as a result of a pre-determined *process* where participants may not have had the opportunity to consider such motives (e.g., Carson, 2008; Faull & Cropley, 2009; Knowles et al., 2012; Kuklick et al., 2015b; Stozskowski & Collins, 2014a).

However, whilst it was evident in the present research that some continued to engage with RP in this way alone (in order to fulfil externally stipulated requirements), others also demonstrated intrinsic reasons for RP engagement (see sections 5.4.3.3 and 7.4.3.5). Furthermore, the few participants that did engage in RP for more intrinsic reasons, such as anxiety management or to deal with challenging life circumstances, described contextual factors that supported this type of engagement (see section 7.4.3.6). These included, for example, a supportive or encouraging supervisor who facilitated such engagement, either directly (through sharing and discussing relevant experiences) or indirectly (through suggesting possible RP tools to use in this type of engagement). This aligns with recent calls from Uphill and Hemmings (2017) who suggest reflective conversations between supervisee and supervisor can help to manage more personal circumstances. In addition, Cropley et al. (2016) reported that reflecting on experiences (e.g., both personal and professional) helped sport psychology practitioners to develop the coping strategies required to manage the demands of professional practice, which the authors suggest has implications for trainee practitioners and its impact on wellbeing as well as practice. Furthermore, RP has also been reported to lead to benefits such as personal growth, self-management and effective practice through developing self-awareness (e.g., Owton, Bond, & Tod, 2014). Therefore, rather than RP simply being marketed as a professional "tool" that "must be done" to achieve a particular standard (an extrinsic approach), the present research also provides support for RP to also be advocated as beneficial in personal settings (a more intrinsic approach), which consequently could be further beneficial to the practitioner role (e.g., managing oneself, coping, mindset, lifelong learning).

A further yet related point of consideration when engaging in RP is to think about *who* the RP is actually for, whether this is simply for one's own "viewing" or for another person to view such as a supervisor, reviewer, mentor or assessor. This is important as researchers outside of sport have described that the content of the RP can change depending on who is going to see it (Hobbs, 2007). Furthermore, Hobbs (2007) described 'hostility' towards RP as a result of it being a forced exercise which can then impact the usefulness of the outcome of the RP (e.g., increased anxiety, strategic RP, reduced honesty for fear of retribution). Within the present research, it was evident that some participants only engaged in RP to produce the evidence required for external review, whereas others engaged more comprehensively with RP for more intrinsic benefits such as managing anxiety or catharsis. In order to counter such tendencies to change the focus of the RP or limit one's honesty when RP evidence is externally reviewed, supervisors and reviewers of trainees' RP should ensure that the purpose of the RP evidence is clear and reassure that being honest will not be penalised. This further requires that supervisors and reviewers are made aware of such expectations for the

qualifications they oversee or mentor on (e.g., BASES SE) within their respective training and CPD.

Finally, thinking about the *focus* of the RP engagement or the *what* is also important. Within the present research are examples of occasions where trainees were required to reflect on stipulated experiences (see section 5.3.2.3), whereas others were given more autonomy on what to focus on (see section 7.3.3.5). However, it is advised, where possible, that a range of different foci are considered when engaging in RP, not only to avoid a feeling of repetitiveness (as reported in section 7.4.3.4), but also to enable access to different levels of RP which may otherwise be hindered by contextual factors. The increased breadth in foci may be further encouraged by offering suggestions of areas to focus on (e.g., within the BASES workshop or by a supervisor) such as ethical dilemmas, challenging conversations, positive outcomes or negative emotions, or taking a more standardised approach, be specifically aligned to the BASES competencies themselves to encourage both breadth and depth within all trainees' RP.

*8.3.4.2 The 'process' of RP engagement*

A variety of methods of RP were discussed within the present research, each with their own strengths and weaknesses. However, in addition, it was often observed that different methods could be viewed positively or negatively by different individuals, posing the argument that individual preference, context and motivation have an important part to play in RP engagement. For example, many participants described written forms of RP as challenging or difficult (see 7.4.3.4), or time consuming (see 5.3.2.3 and 7.4.3.6), whereas others suggested this technique allowed them to think more deeply or provided a sense of closure by getting thoughts and feelings out of the mind and on to paper (see section 7.4.3.4). Similarly, verbal RP was said by some to be more time efficient and natural, and when engaged in with other people, allowed for alternative perspectives to be considered and thus more critical reflection, whereas others perceived this mode to be more challenging and anxiety provoking. Similar findings have been observed in non-sport settings (Platzer et al., 2000a; 2000b) where reflective groups were deemed both advantageous yet also challenging. Therefore, more autonomy over the modes of RP one engages in would be beneficial for future RP engagement and learning, especially within a self-directed programme of development such as BASES SE. Supervisors and reviewers of the BASES SE programme should also be mindful of this need for variety in RP methods and as key agents in the process, provide both encouragement and opportunity for trainees to engage with different modes of RP (e.g., written, conversational, individual, shared or group).

The present findings also suggest that trainee practitioners do not intentionally consider the *process* by which they engage in RP in relation to the *purpose* or the *outcome* of

that engagement. Participants tended to either engage in the RP process stipulated to them (depending what is asked) or when autonomy was afforded, maintain the RP processes they deemed easiest, most time efficient or were introduced to first. As alluded to in the sections above, RP is an individualised and context dependent process, and specifying an RP technique could result in a less than positive outcome (e.g., reduced motivation or strategic RP in terms of what is focused on, how honest the RP is or the time available to engage), or not achieve the outcome that was indeed intended. Within the present research, only one participant (see section 7.4.3.6) challenged this general view by intentionally matching the RP technique to the purpose of the RP itself, demonstrating an individualised approach to RP engagement resulting in a perceptually more positive learning experience. To explain this alignment or congruence in methods, the participant described using a specific reflective framework (e.g., the Gibbs cycle) for technical reflection (e.g., session delivery) and verbal RP techniques (e.g., a video diary) to explore challenging experiences (e.g., decision making and planning in high pressure settings) more deeply and critically. One benefit offered by the participant regarding this congruent approach was the opportunity to visually 'see' the emotional detail after completing a video reflection compared to a written alternative, as well as the increased time efficiency associated with this technique. Learners and trainee practitioners are therefore, as mentioned above, encouraged to explore different techniques of RP in order to ascertain different outcomes or for different purposes, as well as further consider whether their chosen technique is indeed the best approach to take. For example, if a learner is limited by a lack of knowledge, or becomes 'stuck' when using a structured RP framework (e.g., within the Gibbs cycle, some individuals are unsure how to complete the 'analysis' and 'conclusion' stages, or are unsure on what 'action plan' to include), then incorporating other people (e.g., a fellow trainee or supervisor) into the RP process may be useful. Alternatively, if rumination is a negative issue, using a reflective journal or audio recording device to process one's thoughts may be more useful, with a view to involving other people in the process later, if needed. It is therefore suggested that based on the present findings, trainee practitioners should specifically consider the purpose of their RP when choosing an RP technique and in doing so, appreciate a variety of RP techniques in order to explore the different outcomes and/or purposes that could be achieved. This recommendation also requires reviewers and supervisors to be more receptive to varied RP techniques, to be aware of what is being advocated in the core BASES RP workshop and further understand the implications if such variety is not encouraged. In addition, more guidance should be provided to trainees about the different techniques of RP that are possible to enable congruence between *purpose* and *process*.

As well as the technique of RP, it is also suggested that the timing (the *when*) of the RP should be considered (Knowles et al., 2001). As evidenced in the present research, some

participants engaged in RP as close to the experience being reflected on as possible (immediate), often due to experiencing better memory recall of what happened and the associated feelings that occurred, whereas others 'stored up' their RP engagement until a more suitable time was available (delayed), which for some, coincided with an impending deadline for providing RP evidence, or that a regular RP schedule was utilised (e.g., RP was completed on a Friday based on the experiences of that week). Research has advocated both immediate and delayed RP (Knowles et al., 2001), therefore trainee practitioners are encouraged to reflect on the timing of their RP engagement in relation to the intended purpose of that engagement, as well as the subsequent impact upon the outcomes of this RP. For example, immediate reflection may lead to an increase in confidence within a specific practice situation, but reflecting on the same experience at a later date may result in a different or subsequent outcome, such as a different action plan as to how a situation may be dealt with in future or indeed a changed perspective. A further iteration of delayed RP is that of 'meta-reflection' which involves reflecting on one's reflection and is further removed from the originating action (Ghaye & Lillyman, 2000). Rather than simply engaging in a discreet process with a definitive endpoint, meta-reflection aims to encourage individuals to think about the outcomes and implications of their RP engagement specifically, and if needed, make adjustments for future RP where possible improvements or changes could be made. Not only would this approach support more critical reflection, but it would also serve as a focus for supervisors and supervisees to further consider engagement in RP to that of it being embedded within a developmental process. A natural point for this to take place, for example, may be at the end of the training period (e.g., BASES SE) as an individually written piece of RP (e.g., within a portfolio submission or case study) or a conversational or shared form of RP (e.g., within a viva). Additionally, meta-reflection could also be encouraged at each point of submission where trainees could reflect on their RP engagement over a specific timeframe (e.g., each year) to provide external reviewers insight into individual RP experiences.

*8.3.4.3 The 'outcome' of RP engagement*

As illustrated in the present research, there are many outcomes afforded from engaging in RP which have been heavily reviewed and discussed within the literature (cf. Paget, 2001). For example, a key facet of RP is to improve one's understanding about different experiences, therefore reflecting on what indeed has been learned from such experiences is important to consider. Furthermore, RP can lead to new knowledge which could relate to a contextual (e.g., how to operate in a certain setting or with a specific population) or theoretical matter (e.g., improved understanding after reading about a specific concept or theory). As evidenced in the present research, RP can also lead to changes in the practitioner themselves (e.g., increased confidence or self-awareness), which are important characteristics of effective

practitioners (Cropley et al., 2010a). Another outcome of RP engagement is that a new perspective could be ascertained (perspective transformation; Mezirow, 1981) which may contrast an earlier held view and is aligned with critical reflection. Ultimately, given the highly contextual nature of RP, it is important to consider all possible outcomes of one's engagement in order to maximise the process of experiential learning. As shown in the present research, outcomes of RP can be intentional or more unexpected (see section 7.4.3.5) yet reflecting on *all* outcomes can help to unveil a deeper understanding. Therefore, it is encouraged that trainees consider a wide range of RP outcomes, including those about the situation under scrutiny, the self, one's practice, and any predisposing beliefs and assumptions. Some examples or prompts are provided in figure 8.1 or could indeed be provided to trainees within pre-workshop educational materials or included in discussions with supervisors to ensure maximal depth of RP and thus learning.

### 8.4 Practice Recommendations

Based on the findings presented in this thesis there are several recommendations to further educational research, training and facilitation of RP within a SES setting. Furthermore, some specific recommendations have been organised below into three levels and positioned within the context of BASES (see Table 8.1-8.3).

Table 8.1. Recommendations for proposed changes for the BASES RP Workshop based on research findings

| ***BASES RP Workshop*** | | |
|---|---|---|
| **Current Guidelines** | **Proposed Changes** | **Rationale & Evidence Base** |
| The BASES SE guidelines (2009) state:<br><br>*To successfully complete SE, a supervisee must:*<br><br>*Attend the five BASES core SE workshops (entry, ethical practice and confidentiality,* ***reflection*** *and self-evaluation, understanding your client, safeguarding welfare)*<br><br>At present, no guidelines are provided for *when* the workshop should be completed. | Based on the present research, it is recommended that:<br><br>1. *Timing:* The RP workshop should be completed within the ***first six months*** of BASES SE<br><br>2. *Content:*<br>o A wider focus on the range of benefits of RP (beyond the requirement to simply to complete the qualification in hand) is provided.<br>o More practically orientated activities are included in the workshop to provide delegates with an opportunity to practice their RP whilst access support or feedback from a facilitator is available.<br><br>3. *Evaluation:* In addition to the current workshop evaluation forms, further evaluation data should be collected at later timepoints to explore the longer-term impact of this learning episode. The workshop evaluation form could additionally be modified to include some scale-based questions to further explore changes over time in perceived confidence, competence, reflective thinking and reflective learning.<br><br>4. *Post-workshop CPD:* Suggestions were made as to a follow up RP workshop, which could take the form of a webinar, with a pre-requisite criteria of workshop one completion, and focus on research / practice / policy updates surrounding RP and could be aligned with the re-accreditation period (e.g., every 5 years). Alternatively, this suggestion may also be achieved through adapting the criteria of the BASES "Understanding Your Client" workshop to enable delegates to utilise shared RP and interact with other trainee practitioners at a similar stage of development, as well as share their RP approach within their presentation. | 1. *Timing:* It is important that the trainees have experience on which to reflect and an opportunity to put their new knowledge and skills into practice in order to develop their RP whilst engaged in BASES SE, and whilst under supervision, which is limited if completed in the second half of BASES SE. In addition, whilst RP benefits are dependent on individual context, they ideally should be accessed as soon as possible within the BASES SE journey which may also in turn facilitate other aspects of the program.<br><br>2. *Content:*<br>o Could help to alleviate the extrinsic 'tick box' approach seen so often in trainees<br>o Providing an opportunity to practice RP and/or obtain feedback from an experienced facilitator is likely to further improve RP understanding and confidence, thus future engagement in RP beyond the workshop.<br><br>3. *Evaluation:* Study 4 revealed that some of the metacognitive aspects of RP as measured by the Reflective Learning Scale (RLS; Sobral, 2000) are not significantly developed until at least 12 months after the workshop. Therefore, relying on one evaluation form immediately post-workshop completion may only provide limited information compared to a follow up evaluation.<br><br>4. *Post-workshop CPD:* The RP workshop provides an opportunity to develop one's level of RP knowledge and skill, and tools to support future RP engagement. However, providing other CPD relating to RP would allow practitioners to keep up to date with contemporary developments, seek support where further facilitation is needed, thus helping to maintain practitioner effectiveness and adhering to lifelong learning / CPD. The suggestion to include an RP element into the "Understanding Your Client" workshop, which is typically completed towards the end of BASES SE, would however enable delegates to showcase their RP approach and respond to questions on this to demonstrate their understanding, providing further rationale (or motivation) for RP engagement throughout BASES SE. |

Table 8.2. Recommendations for proposed changes for BASES Supervisors and Reviewers based on research findings

| ***BASES Supervisors & Reviewers*** | | |
|---|---|---|
| **Current Guidelines** | **Proposed Changes** | **Rationale & Evidence Base** |
| No specific guidance on RP for supervisors, but the BASES SE guidelines (2009) state:<br><br>*it is expected that a supervisor directly observes at least 20 hours of a supervisees practice hours.* | Based on the present research, it is recommended that:<br><br>1. All supervisors and reviewers should either attend the same BASES RP workshop (focusing on supporting others' RP) in order to undertake this role or attend a familiarisation session that is specifically provided for supervisors and reviewers. These should include specific guidance and criteria for supporting others, as well as guidance for judging competence or sufficient engagement with RP<br><br>2. Supervisors (and reviewers) should provide evidence of ongoing CPD related to RP in order to maintain supervisor (or reviewer) status in line with re-accreditation processes, or;<br><br>3. Supervisors should provide evidence of shared RP engagement with their supervisees to illustrate such an approach | 1. The current BASES supervisor / reviewer workshop is undertaken just once, unlike the re-accreditation process which takes place every 5 years. The existing process assumes that BASES accreditation is enough to be a competent supervisor or reviewer, but these roles also involve the facilitation (and judgement) of others' RP. **Chapter 5 (Phase 2)** revealed that supervisors and reviewers may benefit from additional training or support with the RP aspect of BASES SE. **Chapter 7** revealed that some supervisors did not facilitate the RP aspect of SE well, which may link to a lack of experience in doing so. Published literature further suggests that key skills are required to be effective in supporting and facilitating others' RP.<br><br>2. Ensuring that supervisors and reviewers are able to support the RPs of those they are supporting is important. Therefore, ongoing CPD (e.g., periodically) to ensure supervisors/reviewers remain up to date could ensure that key developments are communicated and received.<br><br>3. Shared RP has been found to be beneficial in enabling alternative perspectives to be considered as well as increased awareness, supported conceptually by the unconscious incompetence framework where ideas can be brought from the unconscious into the conscious. Shared RP can also facilitate individuals in moving towards critical reflection, associated with deeper learning. |

Table 8.3. Recommendations for proposed changes within the existing BASES SE Scheme based on research findings

| ***BASES SE Scheme*** | | |
|---|---|---|
| **Current Guidelines** | **Proposed Changes** | **Rationale & Evidence Base** |
| The BASES SE guidelines (2009) state:<br><br>*To successfully complete SE, a supervisee must:*<br><br>*- undertake of 500 hours of supervised practice plus **reflection**;*<br><br>*- maintain some form of supervised practice log in which they keep a record of their preparation for, delivery of and **reflection** on their practice*.<br><br>*To apply for BASES Accreditation, delegates must "understand the value of reflection on practice and evidence engagement in the process" (BASES Accreditation Competency Profile, 2016, p. 8).* | Based on the present research, it is proposed that all those engaged in BASES SE should:<br><br>1. Provide evidence of a range of different approaches to RP engagement, including (but not limited to):<br>a. written, conversational,<br>b. individual, shared, informal and formal.<br><br>2. Provide evidence of RP in association with each of the BASES competencies to ensure a range of experiences are reflected upon<br><br>3. Provide evidence of their RP journey and experience throughout BASES SE (e.g., submitted with halfway and final submission)<br><br>and;<br><br>4. Take part in a viva examination to discuss their learning experiences and how RP impacted these, competency achievements and overall BASES SE reflections. (This could equally become part of the "Understanding Your Client" workshop, as stated above (p. 204)).<br><br>or:<br><br>5. Provide a mandatory case study (currently optional) at the final submission which would enable trainees to showcase their RP journey within a specific setting and explore how this had developed throughout the learning period of BASES SE. | 1. The current BASES SE guidelines do not provide enough detail to support RP engagement and trainees can easily progress through the SE process adopting a surface level or strategic approach to RP. However, by requesting a variety of RP techniques to be evidenced, a more critical approach could be encouraged.<br><br>2. Stipulating that trainees engage specifically in RP on each of the BASES competencies would ensure that trainees are reflecting not only on the competencies they feel most comfortable with or those more readily accessed, but also those which may be more challenging and thus offer an alternative outcome. This also provides more opportunities to try varied RP techniques and seek congruence between purpose and method within reflections.<br><br>3. The guidance to 'evidence engagement in reflective practice' is too vague, and thus contributes to a lack of understanding of what is required, and as a result, can impact one's confidence to be successful (or 'do RP correctly'), resulting in a further lack of engagement (see **Chapter 7**). Requesting evidence of the delegates 'RP journey' throughout BASES SE could therefore promote further engagement with the process, promoting more dialogue with the supervisor about RP and thus opportunity for further facilitation.<br><br>4. From the perspective of a reviewer, the interpretation of what is expected to fulfil this current criterion is ambiguous, resulting in uncertainty, confusion and a potentially negative experience of RP at this level. However, building RP into the "Understanding Your Client" workshop criteria, which could be verified by a competent RP facilitator (e.g., RP workshop deliverer) could also provide support for reviewers who feel less confident or competent in reviewing this element of BASES SE.<br><br>5. A case study provides an opportunity for meta-reflection and potentially overcomes the desire for surface level or strategic RP by encouraging more depth and criticality. |

### 8.5 Research Recommendations

Notwithstanding the contribution that this thesis makes to existing knowledge in the field of RP engagement and development within a SES practitioner setting, there are a number of improvements and future research recommendations that could be considered.

To extend understanding regarding RP in the SESs researchers should ask participants to provide examples of their reflections without stipulating the technique that should be used. The present research (Ch. 7) required participants to submit written reflections in line the current BASES SE processes. However, the findings suggest that not all are able to or have the motivation to engage in this one method, and other modes of RP could be more beneficial for individual learning or allow further criticality to be achieved. Therefore, encouraging trainees and learners to engage in RP processes of their choice provides a level of autonomy, which can lead to increased motivation to fully engage with the process, and an increased likelihood of achieving desirable outcomes from that engagement. In addition, allowing choice of RP method is more likely to illicit deeper or more critical reflection given that not all individuals have the ability to reach the highest levels using certain (or stipulated) techniques. From an analysis perspective, a similar method of judging levelness (if required) to that used in the present research (Ch. 7) could still be utilised regardless on the mode of RP used.

Additional pre-workshop data could have been collected in addition to the baseline questionnaires used in the present research in order to further understand the participants experiences of RP prior to the compulsory RP workshop. Such information could be collected through the implementation and completion of a pre-workshop workbook prior to attendance which would advance the current research, but would also provide an opportunity for the workshop presenters to gain insight into the delegates' knowledge and experience of RP prior to first meeting in a face-to-face workshop setting.

In addition, future research could also examine the RPs of delegates from the start of BASES SE as opposed to only from the point of the RP workshop, as the timing of which was different for all participants, and therefore may provide further evidence for the most effective timing of the RP workshop and the suggested benefits associated with RP engagement. A possibility could be to ascertain such data (e.g., via the questionnaires and scales used in Ch. 7) as part of the BASES SE entry process, which would provide a more comprehensive view of longitudinal RP development throughout the whole duration of the BASES SE scheme, and would also provide evidence for other CPD practitioner development programmes (e.g., BPS DSEP, SENr) to utilise in effectively facilitating and supporting RP in their trainees.

It is also suggested that future research should obtain immediate post-workshop data such using the scales and interviews utilised in the present study to ascertain short term or immediate impact of the curriculum, especially given that different variables changed at

different rates over time. This would also avoid the reliance on retrospective recall for exploring pre-workshop experiences and perceptions.

Given the influence of contextual factors involved in RP engagement, an area that was not available for further exploration was the experiences of those that withdrew and ceased engagement in the data collection within chapter seven (see Table 7.1), which if available may have provided insight into the issues and barriers surrounding such engagement. Researchers should, therefore, consider contacting such participants for feedback on why dropout may have occurred, perhaps by an email or brief questionnaire, which would provide more insight into RP engagement barriers.

### 8.6 Conclusion

Upon commencing the present research, it was evident that RP was a process surrounded by confusion, especially around the utilisation and efficacy of RP within practitioner settings. The findings of the thesis provide support for and confirmed the notion that RP is indeed a complex and often misunderstood process surrounded by ambiguity. Consequently, it is argued that RP should be facilitated by trained personnel in order to ensure positive engagement and lifelong practitioner learning. Whilst RP literature within sport (up to and including 2013) was deemed to contribute to the lack of understanding experienced by practitioners working in different sport settings as well as those in supervisor or reviewer roles, the subsequent research (2014 onwards) has unearthed specific calls for training which are made directly to those in positions required to support and facilitate RP in trainees. The anticipated consequences of which are to enable practitioners to feel more confident and competent in such roles [4]. In addition, the findings suggest that RP facilitation should, where possible, be considered from a wider individual perspective given its highly contextualised nature and factors revealed through the studies that can impact its utility. To explain, not only is RP for professional purposes important, but also for personal reasons. This is important for not only improving RP engagement in trainee practitioners who need to comply with external requirements, but can further help beyond the tenure of such programmes (e.g., BASES SE) to experience lifelong learning and benefits presented through RP engagement, which include

[4] At the time of writing this chapter (2019), BASES Sport and Exercise Psychology Accreditation Route (SEPAR)[4] had recently launched, which is a new route for aspiring sport psychologists within the BASES professional development programme, permitting registration on the HCPC register. With regards to RP, the SEPAR route requires all delegates to attend the BASES RP workshop as seen in the current BASES SE scheme, but in addition, all supervisors must also complete and engage in CPD, some of which will include RP facilitation. Therefore, there may be future opportunities for the present research findings to impact the BASES SEPAR scheme, which could be tracked in line with HCPC audits.

increased self-awareness, increased confidence, improved SES practitioner skills (e.g., improved communication, becoming more client focused and increased understanding) as well offering a more personal process to support management of emotions and coping, which in turn promotes further RP engagement.

In addition, RP research within a sport context has typically focused on students or experienced practitioners as participants, whereby single method approaches to RP were typically favoured (such as a reflective diary). Part of the present research therefore explored the RP experiences of trainee SES practitioners who have rarely been the focus within RP research, in addition to those with more expertise (e.g., supervisors, reviewers and educators) who were also important to the present research. Although the trainee practitioners were also asked to use a specific technique of RP (written reflection), this was only one data type of three (also questionnaires and interviews). Research interviews provided the participants with autonomy to share their personal experiences and approaches to RP, highlighting a lack of congruence between the *purpose* and the *process* of RP which, if more aligned, would benefit RP engagement and practitioner development. Personal preference (for RP techniques), motivation and the individual's context were highlighted as important areas to consider with regards to engagement within the RP process. An incongruence was also noted between the process of RP engagement and the evidence trainees provided to evidence this engagement. Such incongruence is likely to increase the probability of experiencing the typically reported barriers associated with RP engagement (e.g., lack of time), providing a new finding which extends the knowledge and understanding of RP engagement beyond that which is available in the literature to date. Regulating bodies (e.g., BASES) are therefore advised to embrace change to encourage a *variety* of RP techniques within their evidence requirements in order to ensure trainees are able to provide accurate accounts of their RP engagement experiences. Furthermore, trainees are strongly encouraged to align their RP process with the intended *purpose* of the engagement which must be explicitly outlined within their RP education. Finally, supervisors and reviewers as key agents within the developmental journey must be aware of what is taught to trainee practitioners within their RP education (such as the BASES RP workshop) and the best practice of how to support these delegates within the BASES SE programme. In order to further support RP engagement within (trainee) practitioners, a model was presented to depict the key areas for consideration when embarking an RP journey. Specifically, as a result of the present research it is suggested that the *purpose*, the *process* and the *outcome* of RP are reflected upon in order to ensure a more positive and effective RP experience.

Finally, at the outset of the thesis no research existed investigating RP engagement and development over a longitudinal period, particularly within an SES context. The present research therefore initiated an exploration of individual experiences of RP over a longitudinal

period after attending a specific (BASES) RP workshop, whereby significant changes in reflective thinking and reflective learning were observed. This was coupled with significant improvements in perceived confidence and competence to reflect, which coincided with experiences of increased awareness and understanding towards RP. However, in exploring the individual development of RP over time and the associated experiences of RP engagement in a variety of contexts, the present research also revealed a lack of congruence between the *purpose* and the *process* of RP which, if more aligned, would benefit RP engagement and practitioner development.

### 8.7 Reflective Epilogue: Critical reflections

In completing this thesis on the processes of reflective practice engagement, it seems fitting to offer some of my own reflections on the PhD journey and in doing so put, 'on paper' a personal commitment furthering my own practice. In do so, I illuminate the tensions that existed between my evolving identities and the differing roles – academic and practitioner - I undertook and the requirements to fulfil the PhD journey. I also offer reflections on how I negotiated the methodological choices within this thesis. These are interrelated themes that are difficult to write chronologically.

#### *8.7.1 Evolvement of my identity*

The completion of this research over the last ten years has not been without challenge, particularly as I felt I never truly met the expectations associated within the differing workspaces I inhabited. My entry into academia started by providing teaching support rather than transitioning through the more traditional full time PhD study. Therefore, academic teaching experience progressed ahead of PhD research. As a consequence, I found myself inhabiting two academic spaces but not being fully part of either. Indeed, a key part of the fulltime PhD journey is being immersed in a community of students who are able to share their positive and challenging experiences with one another. However, I was not able to share in these vital experiences due to being a full time academic and part time PhD student - at an external institution. Similarly, even though I had the general support of academic colleagues within my sport and exercise science team, I was the only one with an interest in qualitative research and the only one without a PhD. Subsequently, I often felt like an imposter during meetings and discussions about numbers of publications and involvement in the Research Exercise Framework (REF). Together, these day-to-day experiences often left me with intensified feelings of loneliness as I internalised negative thoughts about my value and worth.

The negative perceptions that I held about my academic worth were, however, offset by the positive experiences I had as an applied practitioner. Indeed, the process of becoming a BASES accredited sport and exercise scientist involved connecting with like-minded

colleagues and engaging in regular shared reflection. Furthermore, working in the applied world of sport, athletes, coaches and parents appeared to value the 'expertise' and 'impact' I was able to make to enhance performance and provide support. As such, my applied experiences within sport boosted my confidence and sense of self-worth. However, these experiences were also time consuming and took place on top of my full-time academic commitments. Consequently, my entry into motherhood two years after achieving my accreditation meant significantly reducing the amount of work I could undertake as a practitioner. It was here, for the first time, I became aware of my gendered identity and the reality that as a new mother I could not perform all of my previously held tasks. This resulted in me losing a number of established relationships in elite sport that I developed over several years and prioritising local work in order to maintain BASES accreditation. Importantly, being somewhat removed from providing sport science support whilst on maternity leave and upon my return to full time employment, I found myself questioning my ability, and how I could obtain that same recognition as my male counterparts.

Being a mother had an impact on my identity as an academic as I had to negotiate a substantial maternity leave period and 'put the brakes on' PhD data collection and writing. This time was a blur, as the reality of exhaustion, sleep deprivation and looking after a new-born baby took hold. Whilst the year passed quickly, I returned to full time work with feelings of trepidation as I had less than one month to prepare for the new semester and also to pick up where I left off with the PhD. Furthermore, to be overlooked for academic progression because I did not have a PhD provided a stark reminder of my lack of fit. In some way I felt guilty for being female and a mother. But I equally felt guilty for feeling like this having experienced the most precious time looking after my son. However, despite these feelings, taking time out to be a mother allowed me to develop a longitudinal approach to exploring RP, something that was yet to be achieved within a SES setting, and more specifically, a BASES cohort. This positive 'spin' was continually championed by my supervisory team, especially my DoS, Zoe. She always had a way of making me feel better about myself and my ability, no matter how many times I disclosed to her my fears and doubts (when I eventually plucked up the courage to express them – imposter syndrome again). Having a female DoS with multiple identities was extremely helpful. We had so much in common – both employed by the institution we originally studied at, both with academic and practitioner commitments and both busy mums. I couldn't have asked for a better role model to guide and support me through this journey. Admittedly, I didn't always look forward to our regular meetings and reflective conversations, whether in person over lunch, or over the telephone, as I approached them feeling inadequate and incompetent based on my situational experiences. However, without fail, I always left her company feeling confident, valued and motivated. Needless to say, critical friends were a vital part of my successful journey.

Between official PhD meetings with my supervisors which took place every few weeks, sometimes months given my part time status, I also met (as often as we could) with two wonderful ladies within my institution but from different departments who were on similar PhD journeys. Given our mutually busy schedules, this may have only been every 2-3 months at most, but the time spent was once again invaluable. We vented, shared our worries and concerns, as well as our specific research challenges, especially progress, milestones and our ongoing performance in juggling multiple tasks simultaneously. Although they were both a little older than me, we still had so much in common; all females working in male dominant departments, all balancing data collection, analysis and isolated writing on top of full-time lecturing roles, as well as all being mothers. Our shared reflection provided an opportunity for catharsis, showcasing empathy and developing a deeper understanding – of ourselves, each other and our worlds.

*8.7.2 Methodological reflections*

Not only did inhabiting different spaces (e.g., home, two different institutions and applied sport) constantly challenge my identity (e.g., female, mother, practitioner and academic), but I also found negotiating the diverse ways RP was conceptualised and the array of methodological approaches employed by researchers in the field provided opportunities for critical reflection. Indeed, throughout the PhD journey I wrestled with my assumptions that RP was complex, individualised and contextual, and the need to provide conceptual clarity and evidence change in depth over time. This led me to a question I don't think I really resolved – *how can gaining conceptual clarity or universal understanding of RP represent the subjective and contextual nature of this phenomena?* Nevertheless, as I began to understand different philosophical positions, I felt I could not escape navigating the space between positivism and interpretivism and their respective assumptions. The first, positivism, requiring me to be objective and distant from my data whilst controlling for validity, reliability and generalisability, whilst interpretivism required me to acknowledge my biases and develop rapport with participants. Hence, I felt that capturing interview data and subjective reflections on one side (interpretivism) and reflective questionnaires and quantitative surveys on the other (positivism) provided a paradoxical experience. Even though I finally adopted the position of pragmatism – which made intuitive sense – I still felt like an outsider; a space where I am not considered to be a hard scientist nor a qualitative researcher in the truest sense.

Finally, as I reflect on the methodological journey, the relationship and connection I established with the different groups of participants provided moments for reflexivity. Reflexivity fuelled by Arksey and Knight's (2011, p.101) assertion that "quality of the data is dependent on the quality of relationship built up between the interviewer and interviewee". Driven by the desire to gain quality and meaningful data the reality of the differentiated

relationships between myself and my participants remained at the forefront of my thinking as I kept reflexive notes. Indeed, given the longitudinal nature of the research process, my initial interviews with experts in the field filled me with anxiety, especially I had referenced most of these participants throughout my undergraduate degree and subsequent teaching practice. Here I was reminded about the way power within the interview process is often unequally distributed as my fragile academic identity encountered more these well-known educators and practitioners (Brinkmann & Kvale, 2015). In some cases, the feelings of anxiety or being an outsider were maintained throughout some of the interviews as participants response were brief and lacked the conversational approach I had hoped for. However, in a few cases, as the interview progressed the initial sense of anxiety subsided as I moved from an outsider to insider position. In these cases, the interviews were conversational, detailed and went beyond the interview schedule. As I reflected on the interviews, I could only think that the differences in rapport could be due to my position as a PhD researcher, different levels of interest in the topic and the different roles that these experts held which may have influenced the amount of time they had available. The same could be said for the trainee partitioners who agreed to be interviewed. Now armed with confidence or power after undertaking the interviews with the experts, I felt the different levels of rapport with the trainees was more about interest in the subject and my position as a qualitative researcher. This was evident by the length of interviews, depth of responses and commitment to the research process. Evident here, was a sense that in some cases I felt like an insider whilst other interviews reinforced my position as an outsider. Consequently, over the different periods of data collection I felt that adopting the position of a ‘traveller’ allowed me to navigate the interview space and the different positions of power (Kvale & Brinkmann, 2009). This meant I viewed interviews as an opportunity to learn from the participants irrespective of the depth of their responses. I found solace in Smith and Sparkes’ (2016) assertion that despite attempts to develop rapport and acknowledge power, there is no way of knowing if participants were telling the truth and “accept that the quest for the single truth is a chimera” (p.118).

# Chapter Nine

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## Appendices

### Appendix 1. BASES SE Competency Profile

# BRITISH ASSOCIATION OF SPORT AND EXERCISE SCIENCES

# SUPERVISED EXPERIENCE COMPETENCY PROFILE

**Updated August 2016**

**Introduction**
This document sets out the BASES **competencies** which are required for accreditation. These are the standards we have produced for the safe and effective practice of sport and exercise scientists. They are the minimum standards we consider necessary to protect members of the public. Individuals on Supervised Experience are expected to develop throughout this process until they meet these standards.

You must meet these standards when you first become accredited. After that, every time you renew your accreditation you will be asked to sign a declaration that you continue to meet the standards of proficiency that apply to your practice within your domain of expertise.

Your domain of expertise is the area or areas of your profession in which you have the knowledge, skills and experience to practise lawfully, safely and effectively, in a way that meets our standards and does not pose any danger to the public or to yourself. We

recognise that an accredited member's domain of expertise may change over time and that the practice of experienced members often becomes more focused and specialised than that of newly accredited colleagues. This might be because of specialisation in a certain area or with a particular client group, or a movement in roles in management, education or research.

**Meeting the standards**
It is important that those accredited by BASES meet our standards and are able to practise lawfully, safely and effectively. However, we do not dictate how you should meet our standards. There is normally more than one way in which each standard can be met and the way in which you meet our standards might change over time because of improvements in technology or changes in your practice. As an autonomous professional you need to make informed, reasoned decisions about your practice to ensure that you meet the standards that apply to you. This includes seeking advice and support from education providers, employers, colleagues and others to ensure that the wellbeing of service users is safeguarded at all times.

**Service users**
We recognise that accredited members work in a range of different settings, which include applied practice in sport and health, education, research and roles in industry. We recognise that different professions sometimes use different terms to refer to those who use or who are affected by their practice and that the use of terminology can be an emotive issue. We have tried to use a term in the generic standards which is as inclusive as possible. Throughout the generic standards we have used the term 'service users' to refer to anyone who uses or is affected by the services of accredited members. Who your service users are will depend on how and where you work. For example, if you work in applied practice, your service users might be your clients or your staff if you manage a team. The term also includes other people who might be affected by your practice, such as carers and relatives.

**Completion of Paperwork**
You are expected to submit a competency profile on 3 occasions throughout your SE process – at the start, at the half way stage and at the end. Between these submissions, you are expected to provide an update on how you are developing and moving towards meeting these competencies. You are required to state whether you have no evidence, partial evidence or full evidence to meet each competency. You should also state where the reviewer can find the evidence within your portfolio and what your proposed development plan is to fully meet this competency. The reviewer will then assess your profile and annotate whether they agree with your rating. The reviewer will only sign off a competency once they feel it has been achieved. You are not expected to be working towards every competency all the time.

Examples of how a competency may be achieved can be found at the bottom of each section. These are examples only and are not essential to achieving a competency.

**Submission Deadlines**
Supervised Experience can take between 2 and 6 years to complete. This system is flexible and therefore a specific deadline is not imposed for submissions. However, you should give an indication on your paperwork as to when you expect to submit your next paperwork. BASES will send a reminder after a 6 month period if a submission has not been made and you will be expected to provide an expected submission date. Only initial applications on the Supervised Experience scheme will have strict deadlines.

**Accreditation Application**
Deadlines for accreditation applications are 6th January and 1st July. Once you have completed SE you will be able to apply for Accreditation. Your application must be submitted before one of these deadlines and will be reviewed after these dates.

# EXAMPLE ONLY – Further forms of evidence can be found in the example case studies on the website

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *1 – Scientific Knowledge*

*Be able to demonstrate a detailed scientific knowledge and understanding relevant to the domain of expertise*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|
| 1.1 | • Know and understand the key concepts of the bodies of knowledge which are relevant to their professional specific practice | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 1.2 | • Understand the structure and function of the human body relevant to their practice, together with knowledge of health, disease, disorder and dysfunction | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 1.3 | • understand and be able to apply the theoretical concepts underpinning sport and exercise science delivery within their domain of expertise | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 1.4 | • Understand the theoretical basis of, and the variety of approaches to, assessment and intervention | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 1.5 | • Understand how sport and physical activity affect and influence the structure and function of the human body | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| ***Examples of how this could be achieved:*** | • Evidence of a BUES sport and exercise science undergraduate degree<br>• Evidence of a BASES recognised postgraduate qualification in sport and exercise science | | | |

**EXPERIENCE**: The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *2 – Technical Skills*

*Be able to demonstrate full understanding and application of relevant scientific techniques*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|---|---|
| 2.1 | • Be able to gather appropriate information via undertaking or arranging investigations as appropriate | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: Appendix 2.1 | | | | |
| | | Proposed Development Plan: | | | | |
| 2.2 | • Be able to select, undertake and record a thorough, sensitive and detailed assessment, using appropriate techniques and equipment | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: Appendix 2.2 | | | | |
| | | Proposed Development Plan: | | | | |
| 2.3 | • Be able to analyse and critically evaluate the information collected | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: Appendix 2.3 | | | | |
| | | Proposed Development Plan: | | | | |
| 2.4 | • Be able to demonstrate a level of skills in the use of information technology appropriate to their practice | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: Appendix 2.4 | | | | |
| | | Proposed Development Plan: | | | | |
| 2.5 | • Be able to conduct appropriate diagnostic or monitoring procedures, treatment, therapy or other actions safely and skilfully relevant to the domain of expertise | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: N/A | | | | |
| | | Proposed Development Plan: Development will be carried out on the section over the next 6 months | | | | |

| | |
|---|---|
| ***Examples of how this could be achieved:*** | • Evidence of BASES endorsed /recognised undergraduate and postgraduate degrees<br>• Completion of laboratory manual or similar<br>• Certification from relevant recognised training courses<br>• Signing off via supervisor<br>• Case study/reflective case logs<br>• Refereed publications<br>• Presentations at conferences and workshops |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *3 – Application of Knowledge and Skills*

*Ability to demonstrate the application of knowledge and technical skills to the relevant delivery environment*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|---|---|
| 3.1 | • Be able to evaluate intervention plans using recognised outcome measures and revise the plans as necessary in conjunction with the service user | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 3.2 | • Exercise sound judgement in the absence of complete information and in complex or unpredictable situations. | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 3.3 | • Scope, plan and manage multifaceted projects | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 3.4 | • To be able to set goals and construct specific individual and group sport and exercise science development programmes | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 3.5 | • Know and be able to apply the key concepts which are relevant to safe and effective practice within their domain of expertise as a sport and exercise scientist | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 3.6 | • Understand and be able to apply the theoretical concepts underpinning sport and exercise science delivery within their domain of expertise | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| *3.7* | • Use specialist experiential knowledge and broader scientific understanding to optimise the application of existing and emerging science and technology | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| ***Examples of how this could be achieved:*** | • Documented evidence of 500 hours of supervised practice signed off by supervisor<br>• Case study following BASES guidelines<br>• Reflective accounts | • Research plan, ethics submission<br>• Teaching plan, curriculum development | | | | |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *4 – Understanding and Use of Research*

*Be able to demonstrate a training in research which enables the understanding and application of research findings*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|---|---|
| 4.1 | • Demonstrate critical evaluation of relevant scientific information and concepts to propose solutions to problems | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 4.2 | • To recognise the value of research to the critical evaluation of practice | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 4.3 | • Be able to engage in evidence-based practice, evaluate practice systematically and participate in audit processes | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 4.4 | • Be aware of a range of research methodologies | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 4.5 | • Be able to use appropriate statistical and other research skills to gather and interpret evidence in order to make reasoned judgements with respect to sport and exercise science practice | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 4.6 | • Be aware of the principles and applications of scientific enquiry, including the evaluation of effectiveness of practice and the research process | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| ***Examples of how this could be achieved:*** | • Evidence of BASES endorsed / recognised undergraduate and postgraduate degree research studies/projects<br>• Critique of published research papers<br>• Research proposal<br>• Literature review<br>• Postgraduate dissertation | • Further research activity including published refereed papers/presentations at conferences or workshops<br>• Returned in the RAE 2008<br>• Case study and intervention<br>• Review how own research could impact on practice | | | | |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *5 – Self Evaluation and Professional Development*

*Ability to self reflect, take responsibility for own actions, and to demonstrate that continuous professional development occurs*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|---|---|
| 5.1 | • Work autonomously and take responsibility for the work of self and others | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 5.2 | • Be able to adapt their practice as a result of new and emerging ideas and information within the area of sport and exercise science | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 5.3 | • Be able to maintain an appropriate audit trail and work towards continual improvement | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 5.4 | • Understand the value of reflection on practice and evidence engagement in the process | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 5.5 | • Take responsibility for continuous performance improvement both at a personal level and in a wider organisational context | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 5.6 | • Understand the principles of quality control and quality assurance | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |

| | | |
|---|---|---|
| ***Examples of how this could be achieved:*** | • Documented evidence of attendance of the required 4 mandatory and 2 optional BASES SE workshops<br>• Documented evidence of all other courses run or attended<br>• Case examples showing how practice has been adapted<br>• Testimonials<br>• Video evidence<br>• Adherence to BASES Code of Conduct | • Reflective accounts maintained over the 2 years of supervised experience<br>• Reflective accounts corresponding to own practice and case study meetings<br>• Career development plan<br>• Attendance at other workshops<br>• Evidence based literature review<br>• Peer review |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *6 – Communication*

*Ability to communicate orally and in writing to colleagues, peers and clients*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|---|---|
| 6.1 | • Demonstrate the ability to communicate effectively with specialist and non-specialist audiences | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 6.2 | • Be able to select, move between and use appropriate forms of verbal and non-verbal communication with service users and others | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 6.3 | • Understand the need to provide service users (or people acting on their behalf) with the information necessary to enable them to make informed decisions | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 6.4 | • Recognise the need to use interpersonal skills to encourage active participation of service users | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6.5 | • Be able to discuss and explain the rationale for, the use of sport and exercise science interventions | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 6.6 | • Be aware of the characteristics and consequences of non-verbal communication and how this can be affected by culture, age, ethnicity, gender, religious beliefs, nationality, sexuality and socio-economic status | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| ***Examples of how this could be achieved:*** | • Documented evidence of attendance of the required 4 mandatory and 2 optional BASES SE workshops<br>• Report from supervisor<br>• Documented evidence of the presentation of information to different groups (peers, client groups etc) via different media (oral, written)<br>• Delivery of a workshop<br>• Video of delivery/communication<br>• Assessing learning styles<br>• Marketing materials | • Documented examples of written material such as client reports, scientific material<br>• Case examples where your communication skills have influenced the outcome<br>• Conferences, posters/presentations, scientific articles<br>• Lectures, curricula and lecture notes<br>• Evaluation forms<br>• Peer and client review<br>• Role play<br>• Ability to translate scientific detail to the end user | | | | |

**EXPERIENCE**: The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *7 – Problem Solving and Impact*

*Ability to address problems in a scientific and evidence based manner which results in a positive and timely outcome*

| | **AREA OF COMPETENCE** | **INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED** | | | **Reviewer Agreement** | **Reviewer Sign Off** |
|---|---|---|---|---|---|---|
| 7.1 | • Be able to demonstrate a logical and systematic approach to problem solving | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 7.2 | • Be able to monitor and review the ongoing effectiveness of planned activity and modify it accordingly | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 7.3 | | No evidence | Partial evidence | Full evidence | | |

| | | | | |
|---|---|---|---|---|
| | • Be able to initiate resolution of problems and be able to exercise personal initiative | Where to find evidence:<br>Proposed Development Plan: | | |
| 7.4 | • Be able to apply problem solving and scientific reasoning to assessment findings to plan and prioritise appropriate expertise specific interventions | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 7.5 | • Recognise the value of case conferences and other methods of review | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 7.6 | • Be able to make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures and record the decisions and reasoning appropriately | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| ***Examples of how this could be achieved:*** | • Case study examples demonstrating the approach taken to solving problems<br>• Documented evidence of attendance of the required 4 mandatory and 2 optional BASES SE workshops<br>• Reflective account of practice<br>• Needs analysis | • Feedback from supervisor<br>• Refereed publications<br>• Presentations at conferences and workshops<br>• Formal evaluation of teaching | | |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *8 – Management of Self, Others and Practice*

*Be able to demonstrate an understanding of management requirements and to mange self and others*

| | **AREA OF COMPETENCE** | **INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED** | **Reviewer Agreement** | **Reviewer Sign Off** |
|---|---|---|---|---|
| 8.1 | • Demonstrate the achievement of desired outcomes with the effective management of resources and risks | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 8.2 | • Demonstrate a commitment to professional development through continuing advancement of own knowledge, understanding and competence | No evidence / Partial evidence / Full evidence<br>Where to find evidence:<br>Proposed Development Plan: | | |
| 8.3 | | No evidence / Partial evidence / Full evidence | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | • Be able to maintain records appropriately | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 8.4 | • Be able to contribute effectively to work undertaken as part of a multi-disciplinary team | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 8.5 | • Promote and implement robust policies and protocols relating to health, safety and security | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 8.6 | • Promote and ensure compliance with all relevant regulatory requirements and quality standards | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 8.7 | • Demonstrate understanding and compliance with relevant codes of conduct | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| ***Examples of how this could be achieved:*** | • Documented evidence of attendance of the required 4 mandatory and 2 optional BASES SE workshops<br>• Structured taught element of post graduate degree<br>• Leading on projects<br>• Risk assessment | • Attendance at relevant workshops and training days<br>• Documented situations which demonstrate appropriate understanding<br>• Team boundaries<br>• Appropriate CPD activities | | | | |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competences set out below.

## *9 – Understanding of the Delivery Environment*

*Be able to demonstrate a knowledge of and integration into, the specific delivery environment*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | Reviewer Agreement | Reviewer Sign Off |
|---|---|---|---|---|---|---|
| 9.1 | • Oversee the implementation of solutions with due regard to the wider environment and broader context. | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 9.2 | • Demonstrate the ability to mediate, develop and maintain positive working relationships | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 9.3 | • Understand the structure and function of relevant services in the UK and current developments within which they operate; and be able to respond accordingly | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 9.4 | • Recognise that relationships with service users should be based on mutual respect and trust, and be able to maintain high standards of case even in situations of personal incompatibility | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 9.5 | • Understand the requirement to adapt practice to meet the needs of different groups distinguished by, for example, physical, psychological, environmental, cultural or socio-economic factors | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 9.6 | Understand the need to agree the goals, priorities and methods of the proposed intervention in partnership with the service user | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| ***Examples of how this could be achieved:*** | • Documented evidence of 500 hours of supervised practice signed off by supervisor<br>• Documented evidence of attendance of the required 4 mandatory and 2 optional BASES SE workshops<br>• Feedback from supervisor and clients | • Case study which demonstrates understanding of and adaptation to the delivery environment<br>• Examples from own practice<br>• Letter of support<br>• Voluntary work | | | | |

**EXPERIENCE:** The candidate should be able to demonstrate that he/she has worked in an environment that has enabled the individual to receive training and gain experience relevant to the competencies set out below.

## *10 – Professional Relationships and Behaviours*

*Be able to demonstrate adherence to the highest standard of ethical and professional behaviour and team work in working with colleagues and clients*

| | AREA OF COMPETENCE | INDICATE SECTION(S) IN PORTFOLIO WHERE COMPETENCE IS DEMONSTRATED | | | | |
|---|---|---|---|---|---|---|
| 10.1 | • Be able to practice within the legal and ethical boundaries of their profession | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.2 | • Be able to practice in a non-discriminatory manner | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.3 | • Understand the importance of and be able to maintain confidentiality | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.4 | • Understand the importance of and be able to obtain informed consent | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.5 | • To be able to exercise a professional duty of care and to act in the best interests of service users at all times | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.6 | • Demonstrate effective leadership through the ability to guide, influence, inspire and empathise with others | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.7 | • Be aware of applicable health and safety legislation, and any relevant safety policies and procedures in force in the workplace, such as incident reporting and be able to act in accordance with these | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |
| 10.8 | • Know the limits of their practice and when to seek advice or refer to another professional | No evidence | Partial evidence | Full evidence | | |
| | | Where to find evidence: | | | | |
| | | Proposed Development Plan: | | | | |

| | | |
|---|---|---|
| ***Examples of how this could be achieved:*** | • Documented evidence of attendance of the required 4 mandatory and 2 optional BASES SE workshops<br>• Relevant taught elements of postgraduate degree<br>• Examples of forms and records kept<br>• Consent forms<br>• Testimonials from service users | • Attendance at appropriate training days<br>• Ethics submission<br>• Sign off from supervisor<br>• Case study examples of good practice |

**Appendix 2: Example questions utilised in the semi-structured interview used in Chapter Four (Phase One)**

| | |
|---|---|
| 1. We have recently produced a review investigating the published literature surrounding reflecting practice in sport. The UK seemed to produce the most research in this area over the last decade. | *Are you aware of work produced in the UK on reflective practice in sport?* |
| 2. From the review, RP research over the last decade is dominated by qualitative methodology, with a lack of 'evidence-based' research, with most of it being 'self-reflective' in nature. | *Why do you think this is the case?*<br><br>*Do you see a need for more 'evidence-based' research in this area, and if so how?* |
| 3. Within our review, several UK and internationally derived articles were removed as they did not discuss the 'process' or 'outcome' of reflection and/or did not include references to support their work. We therefore felt that there may be a lack of understanding about the term. | *What do you feel is happening here?*<br><br>*Why do people use the word 'reflection' without actually 'reflecting'?* |
| 4. Can you describe how reflective practice features in the professional training in ……? | |
| 5. From the review, we feel that practitioners in the UK are typically extrinsically motivated (e.g. by policy/requirements to evidence competence etc.). | *How do we develop intrinsically motivated reflectors/reflective practitioners?* |
| 6. Are there formal requirements for practitioners to demonstrate or evidence RP? | |
| 7. If you could, how would you change (if at all) current educational policy regarding reflective practice and sport psychology in……..? | |

## Appendix 3: BASES Workshop Evaluation Form

### BASES workshop – delegate evaluation form

BASES is committed to developing and improving your practice as a sport or exercise scientist. In order to discover whether this workshop was of benefit to attendees and to improve it if necessary, BASES would be very grateful if you could complete this evaluation form. Only BASES Office Staff will see your individual forms.
A summary of the workshop evaluation forms will be distributed to BASES and the workshop presenters.
Storage and use of the data is in accordance with the provisions of the Data Protection Act 1998.
Thank you for attending the workshop, taking the time to complete this evaluation form and supporting the BASES workshop programme.

| | |
|---|---|
| **Workshop Title** | |
| **Presenter Name (s)** | |
| **Date & venue** | |

**What were the strengths of this workshop? *Please write clearly.***

| |
|---|
| |

**Do you have any recommendations to improve the quality or effectiveness of this BASES workshop?**

| |
|---|
| |

| **In General:** | *(Please tick one)* | |
|---|---|---|
| Did you enjoy this workshop? | YES☐ | NO ☐ |
| Do you think the workshop provided good educational value for money? | YES☐ | NO ☐ |
| Would you attend another BASES workshop? | YES☐ | NO ☐ |

**How did you hear about this workshop?**

| | | | |
|---|---|---|---|
| Direct mail/e-mail from BASES | ☐ | Workshop Organiser | ☐ |
| *The* Sport and Exercise Scientist | ☐ | BASES website | ☐ |
| Social Media | ☐ | Other - *Please specify:* | |

Thank you for completing this workshop evaluation form. You will be presented with a workshop attendance certificate on receipt of your completed workshop evaluation form.

## Appendix 4: BASES Reflective Practice Workshop (Content Summary)

A Core Workshop for BASES Supervised Experience Candidates

### Reflective Practice for Sport and Exercise Scientists

Dr Andy Miles

andymiles9@icloud.com @SPORTEDS

Sport Education Solutions

The British Association of Sport and Exercise Sciences

*Promoting excellence in sport and exercise sciences*

### LEARNING OUTCOMES

**After completing this workshop participants should be able to:**

- Identify how different types of knowledge can be developed through reflective practice
- Appreciate and apply different theoretical models of reflective practice
- Utilise reflective practice as a tool for self-development
- Record and evidence their use of reflective practice

### SESSION OVERVIEW

**Part 1 – Types of Knowledge (WHY)**

- Craft versus Professional knowledge
- Where does knowledge come from?

**Part 2 – Reflective Practice (WHAT)**

- What Reflective Practice is and is not
- Characteristics
- Attributes for reflection
- Importance within SES

### SESSION OVERVIEW cont...

**Part 3 – Process of Reflective Practice (HOW)**

- The 'how to' of reflective practice
- The 'what' and 'when' of reflection

**Part 4 – Evidencing Reflective Practice**

- Reflective diaries
- Case Studies

### OTHER APPROACHES

**Appendix 5: Original questions from the Questionnaire of Reflective Thinking (QRT; Kember et al., 2000)**

1. When I am working on some activities, I can do them without thinking about what I am doing.

2. This course requires us to understand concepts taught by the lecturer.

3. I sometimes question the way others do something and try to think of a better way.

4. As a result of this course I have changed the way I look at myself.

5. In this course we do things so many times that I started doing them without thinking about it.

6. To pass this course you need to understand the content.

7. I like to think over what I have been doing and consider alternative ways of doing it.

8. This course has challenged some of my firmly held ideas.

9. As long as I can remember handout material for examinations, I do not have to think too much.

10. I need to understand the material taught by the teacher in order to perform practical tasks.

11. I often reflect on my actions to see whether I could have improved on what I did.

12. As a result of this course I have changed my normal way of doing things.

13. If I follow what the lecturer says, I do not have to think too much on this course.

14. In this course you have to continually think about the material you are being taught.

15. I often reappraise my experience so I can learn from it and improve for my next performance.

16. During this course I discovered faults in what I had previously believed to be right.

## Appendix 6: Original questions from the Reflective Learning Scale (RLS; Sobral, 2000)

*Please answer the items below in relation to your learning experiences in the medical programme. Draw a circle around the scale number closer to your usual behaviour.*

***To what extent have I:***

1. Carefully planned my learning tasks in the courses and training activities of the medical programme

2. Talked with my colleagues about learning and methods of study

3. Reviewed previously studied subjects during each term

4. Integrated all topics in a course among themselves and with those of other courses and training activities

5. Mentally processed what I already knew and what I needed to know about the topics or procedures

6. Been aware of what I was learning and for what purposes

7. Sought out interrelations between topics in order to construct more comprehensive notions about some theme

8. Pondered over the meaning of the things I was studying and learning in relation to my personal experience

9. Conscientiously sought to adapt myself to the varied demands of the different courses and training activities

10. Systematically reflected about how I was studying and learning in different contexts and circumstances

11. Mindfully summarised what I was learning day in, day out in my studies

12. Exerted my capacity to reflect during a learning experience

13. Diligently removed negative feelings in relation to aims, objects, behaviours, topics or problems pertaining to my studies

14. Constructively self-assessed my work as a learner

## Appendix 7: Copy of the adapted versions of the QRT used in Chapter 6 at baseline (T0) and follow-up (T6 – T24

### Baseline (T0):

| |
|---|
| 1. When I am working on some activities, I can do them without thinking about what I am doing. |
| 2. My previous education and training has required me to understand concepts 'taught by the educators / deliverers |
| 3. I sometimes question the way others do something and try to think of a better way. |
| 4. As a result of my education and experience to date I have changed the way I look at myself. |
| 5. My previous education and training we did things so many times that I started doing them without thinking about it. |
| 6. To pass my previous education and training you needed to understand the content you are studying. |
| 7. I like to think over what I have been doing and consider alternative ways of doing it. |
| 8. My education and training to date has challenged some of my firmly held ideas. |
| 9. As long as I could remember provided material, I did not have to think too much. |
| 10. I needed to understand the material taught by my educators in order to perform practical tasks. |
| 11. I often reflect on my actions to see whether I could have improved on what I did. |
| 12. As a result my education and training to date I have changed my normal way of doing things. |
| 13. If I followed what my educators said, I did not have to think too much within my education and training to date. |
| 14. Within my education and training to date, I had to continually think about the material I was being taught. |
| 15. I often reappraise my experience so I can learn from it and improve for next time. |
| 16. During my education and training to date, I discovered faults in what I had previously believed to be right. |

### Follow-up (T6 – T24):

| |
|---|
| 1. When I am working on some activities, I can do them without thinking about what I am doing. |
| 2. To date, BASES supervised experience requires me to understand concepts 'taught by the supervisor' / or 'learned from a variety of sources'. |
| 3. I sometimes question the way others do something and try to think of a better way. |
| 4. As a result of my BASES supervised experience to date I have changed the way I look at myself. |
| 5. Within BASES supervised experience we do things so many times that I start doing them without thinking about it. |
| 6. To pass BASES supervised experience you need to understand the content you are studying. |
| 7. I like to think over what I have been doing and consider alternative ways of doing it. |
| 8. BASES supervised experience thus far has challenged some of my firmly held ideas. |
| 9. As long as I can remember provided material, I do not have to think too much. |
| 10. 'I need to understand the material taught by my supervisor' / or 'I need to understand theoretical concepts' in order to perform practical tasks. |
| 11. I often reflect on my actions to see whether I could have improved on what I did. |
| 12. As a result of BASES supervised experience to date, I have changed my normal way of doing things. |
| 13. If I follow what my supervisor says, I do not have to think too much on BASES supervised experience. |
| 14. On BASES supervised experience I have to continually think about the material I am being taught. |
| 15. I often reappraise my experience so I can learn from it and improve for ~~my~~ next time. |
| 16. During BASES supervised experience I have discovered faults in what I had previously believed to be right. |

## Appendix 8: Copy of the adapted RLS used in Chapter 6

## at baseline (T0) and follow-up (T6 – T24)

Baseline (T0):
Please answer the items below in relation to your learning experiences to date within your sport-related education and experience. Draw a circle around the scale number closer to your usual behaviour.

To what extent have I:

| |
|---|
| 1. Carefully planned my learning tasks in the courses and training activities of my sport-related education and experiences to date |
| 2. Talked with my colleagues and peers about learning and methods of study |
| 3. Reviewed previously studied subjects during my sport-related education and experiences to date |
| 4. Integrated all topics in my sport-related education and experience to date among themselves and with those of other courses and training activities |
| 5. Mentally processed what I already knew and what I needed to know about the topics or procedures |
| 6. Been aware of what I was learning and for what purposes |
| 7. Sought out interrelations between topics in order to construct more comprehensive notions about some theme |
| 8. Pondered over the meaning of the things I was studying and learning in relation to my personal experience |
| 9. Conscientiously sought to adapt myself to the varied demands of my sport-related education and experiences to date and the different training activities involved |
| 10. Systematically reflected about how I was studying and learning in different contexts and circumstances |
| 11. Mindfully summarised what I was learning day in, day out in my sport-related education and practicum experiences |
| 12. Exerted my capacity to reflect during a learning experience |
| 13. Diligently removed negative feelings in relation to aims, objectives, behaviours, topics or problems pertaining to my sport-related education and practicum experiences |
| 14. Constructively self-assessed my work as a learner |

Follow-up (T6 – T24):
Please answer the items below in relation to your BASES Supervised experience to date. Draw a circle around the scale number closer to your usual behaviour.

To what extent have I:

| |
|---|
| 1. Carefully planned my learning tasks in the courses and training activities of my BASES Supervised Experience to date |
| 2. Talked with my colleagues and peers about learning and methods of study |
| 3. Reviewed previously studied subjects during my BASES Supervised Experience to date |
| 4. Integrated all topics in my BASES Supervised Experience among themselves and with those of other courses and training activities |
| 5. Mentally processed what I already knew and what I needed to know about the topics or procedures |
| 6. Been aware of what I was learning and for what purposes |
| 7. Sought out interrelations between topics in order to construct more comprehensive notions about some theme |
| 8. Pondered over the meaning of the things I was studying and learning in relation to my personal experience |
| 9. Conscientiously sought to adapt myself to the varied demands of my BASES Supervised Experience to date and the different training activities involved |
| 10. Systematically reflected about how I was studying and learning in different contexts and circumstances |
| 11. Mindfully summarised what I was learning day in, day out in my BASES Supervised Experience to date |
| 12. Exerted my capacity to reflect during a learning experience |
| 13. Diligently removed negative feelings in relation to aims, objectives, behaviours, topics or problems pertaining to my BASES Supervised Experience |
| 14. Constructively self-assessed my work as a learner |

## Appendix 9: Semi-structured interview schedule used at T6 (post-workshop) in Chapter 6

| ***Topic*** | ***Questions and prompts*** | ***NOTES*** |
|---|---|---|
| *Introduction and Demographics* | 1. General background leading to SE (e.g. education (from FE), work/career experiences, applied work)?<br><br>2. Current BASES SE status<br>- What stage of SE are you?<br>- How many months/years completed? | |
| *Prior to BASES SE and RP Workshop* | 3. Experiences of RP prior to SE?<br>- What do you understand reflective practice to be (*knowledge*)?<br>- What reflective practice have you done / how have you used RP (*application* of knowledge)?<br>- Why?<br><br>4. Perceptions of RP before commencing SE?<br><br>5. Any experiences (*knowledge*/*application*) prior to SE that you think have made you engage in RP? | |
| *RP Workshop* | 6. What was helpful about the RP workshop you attended in Feb 2015?<br>- What did you learn (*knowledge*)?<br>- What have you tried so far (*application*)? And why?<br><br>7. What was not helpful about the RP workshop? Why?<br><br>8. How could it be improved to support those engaged in SE? Why? | |

| | | |
|---|---|---|
| *During last 6 months of BASES SE* | 9. Experiences of RP since commencing SE (e.g., education, development, support received from supervisor or elsewhere)?<br>- Do you use any specific models (ensure they elaborate/explain)? Why these?<br>- What techniques/methods do you use? Examples of techniques, origins of these? (e.g., workshop, supervisor, book) and why?<br>- How has RP influenced your practice? How do you know this is the case? What evidence do you have to support?<br>- Can you tell me about the support you have received from your supervisor with regards to RP?<br><br>10. What are your perceptions of RP now?<br><br>11. What challenges have you faced so far on SE with regard to using RP? How did you deal with these? | |
| *Moving forwards: next 6 months?* | 12. What are your aspirations/goals moving forwards with regard to developing your RP?<br>- What support would you like to receive or how would you like to be supported with your RP over the next 6 months?<br>- How do you think your supervisor will support you? | |

## Appendix 10: Semi-structured interview schedule used at follow-up stages (T12-T24) in Chapter 6

| ***Topic*** | ***Questions and prompts*** | ***NOTES*** |
|---|---|---|
| *Current status* | 1. Can you tell me about your experiences of BASES SE since we last spoke?<br>- *Where are you at in the process?*<br>- *Any experiences that have impacted your progress?*<br><br>2. What has your reflective practice looked like over the last 6 months?<br>- *Frequency?*<br>- *Methods used?*<br><br>3. How has RP impacted your applied practice and/or development as a practitioner during this time?<br>- *Any specific examples to highlight / describe?* | |
| *Bespoke questions based on prior interview* | 4. You mentioned in the last interview that _____ *(insert comments and questions related to individual).*<br><br>For example:<br>- *Suggested goals / aspirations or action plans regarding RP*<br>- *Follow up on ongoing experiences disclosed in prior interview* | |
| *Moving forwards: next 6 months?* | 5. What are your aspirations/goals moving forwards with regard to developing your RP?<br>- *How would you like to be supported with your RP over the next 6 months?*<br>- *How do you think your supervisor will support you?* | |

## Appendix 11: Participant data collection booklet used at T0 (pre-workshop) in Chapter 6


**Title of Project:** *Tracking the longitudinal development of reflective practice skills and ability within UK-based sport & exercise science practitioners*

**Name of Researcher and School/Faculty**


| | |
|---|---|
| Principal Investigator: | Emma Huntley |
| Research Supervisors: | Prof. Zoe Knowles, Prof. Brendan Cropley, Dr. Andy Miles |
| School: | Liverpool John Moores University, School of Sport and Exercise Sciences |
| Contact details: | Emma.Huntley@edgehill.ac.uk<br>Z.R.Knowles@ljmu.ac.uk |


You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you want to take part or not.

**1. What is the purpose of the study?**

Reflective practice has been found to contribute to the development of competent and effective practitioners. However, it is anticipated that reflective practice could be more formalized within the sport practitioner context as in other professions, which in turn could improve the development, competence and effectiveness of such practitioners. Therefore, this research aims to longitudinally monitor the development of reflective practices within UK-based sport science practitioners registered on the BASES Supervised Experience (SE) programme.

**2. Do I have to take part?**

No. It is up to you to decide whether or not to take part. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time during the study and without giving a reason. A decision to withdraw will not affect your rights/any future treatment/service you receive.

To take part in the study you must be registered on one of the following BASES Supervised Experience cohorts: October-November 2014 or April-May 2015 registration.

**3. What will happen to me if I take part?**

Study participation will be for the duration of your BASES Supervised Experience. Data collection (explained below) will take place at specific time points throughout this period (e.g. 0, 6, 12, 18, and 24 months). As part of your SE programme, you are required to attend several core workshops, including the Reflective Practice workshop which will take place within 4 months of registering for SE. Attendance at this workshop is a specific requirement of participants taking part in this study.

- **Questionnaire data:**

Questionnaires (x2) assessing reflective practice ability will be completed at fixed intervals throughout SE (e.g. 0, 6, 12, 18, and 24 months).

- **Interviews:**

Short (telephone or Skype) interviews at specific time points throughout BASES SE will be conducted. Interviews are expected to last approximately 30 minutes (e.g. 6, 12, 18 and 24 months). Questions and discussions will focus on your ongoing experiences of reflective practice. You may decline to answer any of the interview questions if you so wish. With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, you will be sent a copy of the transcript to give you an opportunity to confirm the accuracy of the information and to add or clarify any points that you wish.

- **Written reflections:**

Participants will be asked to provide examples of their written reflections throughout their SE period, in order to track longitudinal development. Written reflections will be collected at month 6, 12, 18 and 24 OR prior to profile submission (e.g. 12 and 24). Please note: these reflections will not be analysed for content, but will be used to represent the transition in reflective practice over the SE period.

**4. Are there any risks / benefits involved?**

Since the research may involve the discussion about your practice, supervision and/or training, it could therefore involve sensitive issues or the disclosure of highly sensitive information. However, potential benefits to arise from this research include an increased awareness of your own training and professional needs, as well as the opportunity to reflect on practice-based situations. Also, your contribution may result in important changes to be made to the current training routes of sport psychologists.

**5. Will my taking part in the study be kept confidential?**

Yes. All information provided or disclosed during your participation will remain strictly confidential. Any stored information will be not individually identifiable, and will be held on a password protected institutional computer system. Your name will not appear in any thesis or report resulting from this study; however, with your permission anonymous quotations may be used. Data collected during this study will be retained for 5 years in a locked office. Only researchers associated with this project will have access.

**This study has received ethical approval from LJMU's Research Ethics Committee (14/SPS/008)**

**6. Who can I contact for further information?**

If you have any further questions or concerns about the study please contact any of the investigators using the contact details listed above.

**Thank you for taking the time to read this participant information sheet**

# LIVERPOOL JOHN MOORES UNIVERSITY

**Title of Project:** *Tracking the longitudinal development of reflective practice skills and ability within UK-based sport & exercise science practitioners*

**Name of Researcher and School/Faculty**


Principal Investigator: Emma Huntley

Research Supervisors: Dr. Zoe Knowles, Dr. Brendan Cropley, Dr. Andy Miles

School: Liverpool John Moores University, School of Sport and Exercise Sciences

Contact details: Emma.Huntley@edgehill.ac.uk

Z.R.Knowles@ljmu.ac.uk


1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights. ☐

3. I understand that any personal information collected during the study will be anonymised and remain confidential ☐

4. I agree to take part in the above study and any associated interviews ☐

5. I understand that any interviews will be audio recorded and I am happy to proceed ☐

6. I understand that parts of the conversation may be used verbatim in future publications or presentations but that such quotes will be anonymised. ☐

| _____ | _____ | _____ |
|---|---|---|
| Name of Participant | Date | Signature |
| _____ | _____ | _____ |
| Name of Researcher | Date | Signature |

**LIVERPOOL JOHN MOORES**

**UNIVERSITY**

1. **Date of BASES registration:** April 2014 ____

   October 2014 ____
   April 2015 ____
   Other ____

2. **Date of attendance on 'Reflective Practice for Sport and Exercise Scientists' workshop:**

   February 2015 ____
   June 2015 ____
   Other (please specify) ____

3. **What main discipline are you aligned to**?

   Psychology ____
   Physiology ____
   Biomechanics ____
   Other ____

4. **What type of BASES accreditation are you aspiring to hold?** (tick all that apply)

   Support _____ Research _____ Pedagogy _____

5. **Please list any professional qualifications you hold and how long you have held each award.**

   *(e.g. BPS Chartership, UKSCA, HCPC registration, SENR, UKCC Awards)*

   _____
   _____
   _____

6. **Which of the following best describes your status?** (tick all that apply)

   Student (full-time) _____

   Student (part-time) _____

   Employed (full-time) _____

Employed (part-time) _____

Self-employed _____

Other: _____

**7. What is your experience of using reflective practice at the following stages (where applicable)?**

As an undergraduate?

_____
_____
_____

As a postgraduate?

_____
_____
_____

As an employee? (if applicable)

_____
_____
_____

As a BASES SE candidate? (if applicable)

_____
_____
_____

Other?

_____
_____
_____

**8. Right now, how ***confident*** do you feel in your ability to use reflective practice as part of your SE?**

(0 = not at all confident and 10 = very confident)
*Please circle:*

0 1 2 3 4 5 6 7 8 9 10

**9. Right now, how ***competent*** do you feel in your ability to use reflective practice as part of your SE?**

(0 = not at all competent and 10 = very competent)
*Please circle:*

0 1 2 3 4 5 6 7 8 9 10

**10. Have you received any training/mentoring in the area of reflective practice?**

Yes _____ No _____

If yes, please explain: _____
_____

**11. Please provide your contact details so that the reflective practice questionnaires can be administered to you at fixed points throughout your BASES Supervised Experience.**

Name: _____
Email Address: _____
Contact telephone number: _____

# Reflection-in-Learning Scale

Please answer the items below in relation to your learning experiences within your education, training and career to date. Draw a circle around the scale number closer to your usual behaviour.

| | **To what extent have I:** | **1 = *Never*** | | | | | | **7 = *Always*** |
|---|---|---|---|---|---|---|---|---|
| 1 | Carefully planned my learning tasks in the courses and training activities of my sport-related education and experiences to date | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 | Talked with my colleagues and peers about learning and methods of study | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | Reviewed previously studied subjects during my sport-related education and experiences to date | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 | Integrated all topics in my sport-related education and experience to date among themselves and with those of other courses and training activities | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | Mentally processed what I already knew and what I needed to know about the topics or procedures | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 | Been aware of what I was learning and for what purposes | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | Sought out interrelations between topics in order to construct more comprehensive notions about some theme | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | Pondered over the meaning of the things I was studying and learning in relation to my personal experience | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9 | Conscientiously sought to adapt myself to the varied demands of my sport-related education and experiences to date and the different training activities involved | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10 | Systematically reflected about how I was studying and learning in different contexts and circumstances | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 | Mindfully summarised what I was learning day in, day out in my sport-related education and practicum experiences | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12 | Exerted my capacity to reflect during a learning experience | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13 | Diligently removed negative feelings in relation to aims, objectives, behaviours, topics or problems pertaining to my sport-related education and practicum experiences | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14 | Constructively self-assessed my work as a learner | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | ***Please turn over*** | | | | | | | |

| **Taking into account the perceptions referred to above, I consider that my personal skill to practise the reflective process is…** *(Tick)* | | |
|---|---|---|
| **a** | Restricted. I actually require additional preparation (orientation, support, development, practice and feedback). | |
| **b** | Partial. I just need incentives and opportunities. | |
| **c** | Ample. I have autonomy under favourable conditions. | |
| **d** | Maximal. I have full autonomy even under negative pressure (adverse context, no time). | |

# Reflection Questionnaire

Please fill in the appropriate letter to indicate your level of agreement with statements about your actions and thinking in your education, training and career to date.

*A = definitely agree*
*B = agree with reservation*
*C = only to be used if a definite answer is not possible*
*D = disagree with reservation*
*E = definitely disagree*

| | | Answer |
|---|---|---|
| 1 | When I am working on some activities, I can do them without thinking about what I am doing. | |
| 2 | My previous education and training has required me to understand concepts 'taught by the educators / deliverers | |
| 3 | I sometimes question the way others do something and try to think of a better way. | |
| 4 | As a result of my education and experience to date I have changed the way I look at myself. | |
| 5 | My previous education and training we did things so many times that I started doing them without thinking about it. | |
| 6 | To pass my previous education and training you needed to understand the content you are studying. | |
| 7 | I like to think over what I have been doing and consider alternative ways of doing it. | |
| 8 | My education and training to date has challenged some of my firmly held ideas. | |
| 9 | As long as I could remember provided-material, I did not have to think too much. | |
| 10 | I needed to understand the material taught by my educators in order to perform practical tasks. | |
| 11 | I often reflect on my actions to see whether I could have improved on what I did. | |
| 12 | As a result my education and training to date I have changed my normal way of doing things. | |
| 13 | If I followed what my educators said, I did not have to think too much within my education and training to date. | |
| 14 | Within my education and training to date, I had to continually think about the material I was being taught. | |
| 15 | I often reappraise my experience so I can learn from it and improve for next time. | |
| 16 | During my education and training to date, I discovered faults in what I had previously believed to be right. | |

## Appendix 12: Knowles et al.'s (2001) Assessment of reflection mark scheme

TABLE 2. Assessment of reflection mark scheme for Stages 2 and 4 data based on adapted criteria of Mezirow (1981); Goodman (1984) and Powell 1989)

| Level | State description | Criteria |
|---|---|---|
| 1a | Reflectivity | Awareness, observation, description<br>*Description of a short dribbling drill session with junior players* |
| 1b | Affective reflectivity | Awareness of feelings (subjects)<br>*1a followed by analysis of feelings, e.g. coach feeling happy/disappointed about session outcome* |
| 2 | Reflection to reach given objectives | Criterion for reflection are limited to issues of efficiency, effectiveness and accountability<br>*1a, 1b and recogniton of need for readjustment of skill level to achieve session aims* |
| 3a | Reflection on the relationships between principles and practice | There is an assessment of the implications and consequences of actions and self beliefs/values as well as the underlying rationale for practice<br>*1a, 1b, 2 and recognition another coaching style may be appropriate for session delivery* |
| 3b | Wider reflection | Practitioner contributes towards discussion in practice with others regarding the nature of beliefs and moral issues<br>*1a, 1b, 2, 3a, 3b and discussion with others/coach educators regarding culture of coaching in youth football* |
| 4 | Critical reflection | Issues of justice and emancipation enter deliberations over the value of professional goals and practice. The practitioner makes links between the setting of everyday practice and broader social structure and forces and may contribute to ethical decision making in practice<br>*As above and discussion as to whether view of teaching is commensurate with global issues in teaching children in other areas, policies and legislation* |

## Appendix 13: Cropley's (2009) Assessment of reflective practice mark scheme

*Table 1.* Assessment of reflective practice mark scheme adapted from Mezirow (1981), Goodman (1984), Powell (1989), and Knowles et al. (2001).

| Level | State Description | Criteria |
|---|---|---|
| 1 | Reflectivity | Awareness, observation, description<br>*Description of the nature of the session* |
| 2a | Affective reflectivity - Consultant | Awareness of the consultants own feelings<br>*1 followed by analysis of feelings, e.g. consultant feeling happy/disappointed about session outcome* |
| 2b | Affective reflectivity - Client | Awareness of client's feelings<br>*1 and 2a followed by awareness and analysis of the client's feelings, e.g. client feeling anxious about what is being asked of them* |
| 3 | Discriminant reflectivity - Reflection on relationships between principles and practice | There is an assessment of decision making processes, the implications and consequences of actions, and self beliefs/values as well as the underlying rationale for practice<br>*1, 2a, 2b and understanding of the influence of approach/framework adopted on the outcome of the situation – recognition of alternative approaches* |
| 4 | Conceptual reflectivity | Assessment of whether further learning is required to assist in decision making<br>*1, 2a, 2b, 3 and recognition of the methods or actions that need to be completed in order to use knowledge from reflection in order to influence future behaviour / attitudes / perceptions* |
| 5 | Theoretical reflectivity | Awareness that routine or taken-for-granted practice may not be the complete answer, obvious learning from experience or change in perspective<br>*1, 2a, 2b, 3, 4 and consideration of the experience in the context of what has been learnt and how this may influence future practice* |
| 6 | Critical reflection | Issues of justice and emancipation enter deliberations over the value of professional goals and practice. The practitioner makes links between the setting of everyday practice and broader social structure and forces and may contribute to ethical decision making in practice<br>*All above and examination of the constraints that social, political, and economic factors have on action as well as questioning values and actions that may hither to have been taken for granted* |

## Appendix 14: Adapted 'Assessment of Reflective Level' scheme used in Chapter 6

| Level | State Description | Criteria |
|---|---|---|
| 1 | Reflectivity | Awareness, observation, description<br>***Description of the nature of the session*** |
| 2 | Affective reflectivity – Practitioner or Client | Awareness of own (practitioner) or others' feelings<br>***1 followed by analysis of own feelings, e.g. practitioner feeling happy/disappointed about session outcome, or others' feelings, e.g. client feeling anxious about what is being asked of them*** |
| 3 | Technical reflectivity | Reflection to reach given objectives, where criterion for reflection are limited to issues of efficiency, effectiveness and accountability<br>***1, 2 and recognition of need for readjustment of skill level to achieve session aims*** |
| 4 | Discriminant reflectivity - Reflection on relationships between principles and practice | There is an assessment of decision-making processes, the implications and consequences of actions, and self-beliefs/values as well as the underlying rationale for practice<br>***1, 2, 3 and understanding of the influence of approach/framework adopted on the outcome of the situation – recognition of alternative approaches*** |
| 5 | Conceptual reflectivity | Assessment of learning has taken place and/or identification that further learning is required to assist in decision making<br>***1, 2, 3, 4 and recognition of the methods or actions that need to be completed in order to use knowledge from reflection in order to influence future behaviour / attitudes / perceptions*** |
| 6 | Critical reflection | Awareness that routine or taken-for-granted practice may not be the complete answer, obvious learning from experience or change in perspective<br>***All above and consideration of the experience in the context of what has been learnt and how this may influence future practice***<br>And/or<br>Issues of justice and emancipation enter deliberations over the value of professional goals and practice. The practitioner makes links between the setting of everyday practice and broader social structure and forces and may contribute to ethical decision making in practice<br>***All above and examination of the constraints that social, political, and economic factors have on action as well as questioning values and actions that may hither to have been taken for granted*** |