

Surfing the turbulence: Fluctuations in self-perceptions of expertise in the long term developmental journeys of expert-like male sports coaches.

David Turner

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“You only ever grow as a human being if you are outside of your comfort zone.”

Percy Cerutti (quoted by Herb Elliott, in *The Sports Factor*, 2008).

“It was a favourite saying of Tolstoy that the moment one believes that he has reached his ideal his further progress stops and his retrogression begins.”

Mahatma Gandhi (2005, p.171)

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Abstract

The aim of this study is to investigate how self-perceptions of expertise among sports coaches may develop, regress, and redevelop over time within the context of coaching, in light of recent reconceptualisations of expertise, expertise development, sports coaching, coach development, and adult learning. The developmental journeys of four expert-like sports coaches are explored using a life history/life course approach. Written life history accounts are gathered, and repeated semi-structured interviews undertaken (six per participant over two years), focussing upon critical incidents related to coach development and perceptions of expertise, to capture interpretations and feelings. Narrative inquiry is employed to investigate and represent participants' lived experiences, and how they create meaning and identity from them. Co-constructed storied accounts of expert-like coaches' developmental journeys are produced featuring local exemplary knowledge. Looking across the stories and their respective interconnections, to speculate on wider theoretical implications is a further aspect of the study. Theoretical standpoints from a new wave of literature across different subject domains, and a Bourdieusian perspective, are used as guiding interpretive frameworks. This study reveals a more nuanced and complex holistic portrayal of perceived expertise development in contrast to oversimplified conceptions that currently dominate in this field of inquiry. This uniquely longitudinal in-depth exploration of the lived developmental journey of expert-like coaches provides illuminating detail on the process, influences, and continuation of expertise development (that may inform the facilitation and flourishing of other practitioners); uncovering a more intricate conceptualisation of expertise development, encompassing the importance of change and adaptation upon ongoing and recursive (re)development.

Chapter 1: Introduction

1.1 Background

Academic research into sports coaching has a history of less than 50 years, emerging from more established sports science discipline areas (Gilbert & Trudel, 2004), particularly psychology (Bush, Silk, Andrews & Lauder, 2013). However, an acceleration and diversity of papers on coaching in the 21st century is evident (Nelson, Groom & Potrac, 2014), causing a reconsideration of the interdisciplinary and interpersonal nature of coaching, and how it might be conceived.

Recently several leading authors have proposed that sports coaching has mostly been represented in an oversimplified manner (e.g., Cassidy, Jones & Potrac, 2009; Cushion & Lyle, 2010; Jones & Wallace, 2005), given that it is increasingly recognised as a complex process (e.g., Bowes & Jones, 2006; Jones & Wallace, 2006; Jones, Bowes & Kingston, 2010), a perspective supported by a growing body of empirical studies investigating coaching practitioners embroiled in messy contextual action, precluding hard and fast rules (e.g., Denison, 2007; Santos, Jones & Mesquita, 2013; Saury & Durand, 1998).

Hence, there exists a contemporary debate between those who view sports coaching as inherently complex, dynamic, problematic, unpredictable, contested, and contingent; and those who assert that coaching can be modelled, sequential, logical, rational, and informed (or held accountable) by definitive recipes for best practice (Jones, Edwards & Filho, 2014). For the former coaching is characterised by being context specific, holistic, intuitive, and interpretive (e.g., Cushion, 2007; Jones et al., 2010; Jones et al., 2014); while for the latter coaching may be considered technical-rational, reductionist, functionalist, and founded upon a more predictable cause and effect relationship (e.g., Abraham & Collins, 2011; Grecic & Collins, 2013; North, 2013; Lyle, 2007).

To be clear from the outset, as an experienced coach and coach educator, I firmly believe coaching is a complex, sometimes chaotic, endeavour. This seems consistent with a new wave of scholarly work emphasising a more complex, holistic, contingent viewpoint across several domains (developed upon further in section 1.4, and in

Chapter 2). Notwithstanding, I also recognise coaching can be relatively manageable, and informed by guiding principles. In this vein Jones and Wallace (2005, 2006) suggested, via the metaphor of coaching as orchestration, that while coaching is rife with ambiguity, it may be steered to some extent. Likewise, Hock's (1999) term *chaordic* refers to the potential harmonious concomitance and blending of aspects of chaos and order; although I would add there remains the potential for disharmony and imbalance within coaching, reflected in Jones et al.'s (2010) conceptualisation of coaching as occurring at, or proximate to, the edge of chaos.

Thus, consistent with the tenure of Bourdieu's work (drawn upon later – see section 1.4), I would aspire in this study to attempt to reconcile, or bring together to an extent, some apparent opposites (such as those above, and associated others – for instance, theory and practice, agency¹ and structure, objectivity and subjectivity), not for the sake of a quiet life, nor simply in the interests of diplomacy, but in a quest for a more realistic, nuanced and authentic understanding of sports coaching that might more usefully inform our thinking, practice, and philosophies.

This resonates with recent arguments by Jones et al. (2014) for a more flexible epistemological consensus for coaching that recognises shades of grey or degrees of complexity. Nevertheless, the salient point in relation to the current study is that some, in their desire to promote best practice, or professionalisation and accountability, or in an ill-guided attempt to oversimplify what can only be effectively comprehended via an appreciation of its complexity: "Still clamour for the linear functionality of a given 'toolkit' and an effective practice model." (Jones et al., 2014, p.13). I would propose that this can lead to false dichotomies, overly restrictive typologies, and theoretical frameworks that may overgeneralise and distort in their efforts to simplify.

For example, Rushall (2003) referred to self-evident truths in coaching, which can result in myths and assumption based thinking, citing the example of how, contrary to all embracing practices adopted in many sports, studies indicate that female athletes may require different carbohydrate dietary strategies to males. As a further illustration, the Long Term Athlete Development (LTAD) model has been adopted wholesale over

¹ By the term agency or agentic, I mean self-determined.

recent years by many governing bodies of sport, as a guiding framework for longitudinal talent development (Banack, Bloom, & Falcão, 2012; Ford et al., 2011; Lang & Light, 2010); however, some have begun to criticise LTAD as not firmly based on empirical evidence, nor adequately supported by research (Beaudoin, Callary, & Trudeau, 2015; Ford et al., 2011; Posthumus, 2013). Furthermore, there is a danger that coaches may unquestioningly apply and interpret this model in inappropriate ways (Ford et al., 2011), for instance, erroneously categorising athletes into constituent stages based on chronological, as opposed to developmental, age (Leite & Sampaio, 2012), or prescriptively applying the staged recommendations of the model, rather than individually tailoring programmes to athlete needs (Ford et al., 2011).

Attempts have even been made to transfer LTAD based ideas into a staged guiding framework for the development of coaches. Way and O'Leary (2006) proposed a Long Term Coach Development (LTCD) model, although this was opposed by Trudel (2006) as not being sufficiently able to account for ongoing adult learning needs related to how to coach, and criticised by Lyle (2008) as merely founded upon the coaches' role, rather than also accounting for the coaching context. Certainly, as Trudel (2006) suggests, transposing a model, predicated mostly on promoting the physiological growth of youth athletes, on to the career development of adult practitioners in a broad variety of multifaceted educative roles seems an unwise overextrapolation. Nonetheless, LTCD persists in official sports policy documents, such as Vardhan, Balyi and Duffy's (2012) in relation to South African sport, and Bunting's (2008) in the context of a Rugby Union whole sport plan.

However, this is merely one example of many efforts to model, and seemingly signify as straightforward, the coach development journey. Typically staged models are suggested, outlining what kind of experiences need to be undertaken, and what sort of qualities need to be cultivated, in what sequence, in order to inevitably make headway as a coaching practitioner (e.g., Ericsson, Côté & Fraser-Thomas, 2007). While such models might provide a rough route map, their validity is brought into question by research revealing considerable variation in the formative experiences and developmental pathways of high level coaches (Mallett, 2010).

Furthermore, Mallett (2010, p.126) suggests: “Coaching at the elite level is dynamic and has undergone significant transformation in recent years.” indicating that one may reach the ultimate destination only to find the anticipated environment fundamentally altered. So, what may be requisite is a more critical and flexible holistic consideration of the relative impacts of diverse formative experiences, and surrounding influences, upon the development of coaches, how those coaches employ agency to utilise experiences, and learning opportunities, to promote their progression, and the resultant affect upon their knowledge, practices, and self-perceptions (Mallett, 2010). That is, not just a prescriptive outline description of what the developmental journey might look like, but how the convoluted journey is experienced and shaped by the learner, and how they react affectively, including in relation to self-confidence in their own accumulated expertise.

And so, to the focus of this particular study: the lived experience of the long term developmental journeys of sports coaches as they evolve towards expertise. Though, despite much research, expertise itself remains a contested and ill-defined term, which has also been subject to both reductionism and oversimplification (Berliner, 2001; Nunn, 2008). Without becoming embroiled in popular culture and academic debates about the ten year/ten thousand hours rule (see, for instance, Gladwell (2009) and Epstein (2014)), which claims a minimum requirement for experience accumulation for attaining expert levels, across various domains (Ericsson & Charness, 1994), it is worth highlighting, as an illustrative example, how a more realistically complex view of this notion has lately gained ascendancy. Firstly, ten thousand hours of practice in anything is a substantial personal investment, necessitating high levels of motivation (implicating care), and facilitation (such as coaching) (Charness, Krampe & Mayr, 2014). Secondly, it is not merely the quantity of experience that is important, but the quality of that experience, reflections upon it, and learning plus knowledge arising as a result of it; hence, deliberate practice is required, and strategic agency in the learner is involved (Ericsson, Prietula & Cokely, 2007). And, finally, averages mean little for individuals, and there may be considerable variation in the hours required to be invested in acquiring expertise (Epstein, 2014). Nonetheless, it would be easy to adopt an unsophisticated ‘more is better’ attitude to experience pertaining to expertise, when long ago Dewey (1938) highlighted that all experiences are not necessarily educative, and some may be mis-educative.

Expertise development has been commonly conceptualised as a novice to expert continuum (Gegenfurtner, 2013) featuring linear progressive stages, and the acquisition of capacities along the way (Grenier & Kehrhahn, 2008). However, Germain (2006a) illustrates that expertise research has now evolved to a more dynamic view encompassing socio-emotional elements, such that, while expertise patently necessitates both superior acquaintance with a particular body of knowledge, and the cultivated ability to adeptly apply this in practice, it also requires that individuals care deeply about their field, in order to be motivated to invest the energy, and effort, to attain high performance standards. Furthermore, one must be exposed to, and have a willingness to embrace, opportunity, in order to attain excellence.

Nevertheless, Grenier and Kerhahn (2008) claim that affective, experiential, and contextual qualities have largely been downplayed in relation to expertise. Even so, experts typically rely more on their own accumulated experience and knowledge, and have bootstrapped themselves to levels of development where self-reliance and autonomy are key features (Berliner, 2001). Hence, experts are always learning, forever in a constant engagement with change, and a quest for improvement (Schempp & McCullick, 2010). In this sense, expertise is an ongoing process of becoming, rather than something that can be fully attained or mastered (Nunn, 2008); such that individuals should perhaps be considered at best expert-like, and therein also retain the possibility of regressing from expertise, or unbecoming.

Nunn (2008) contends little about expertise is clear-cut. Correspondingly, developing theories have recognised agency and context as crucial developmental influences that have, thus far, been underplayed, highlighting how an expert's performance may be facilitated or threatened by the situation or environment operated within (Martinovic, 2009). From this perspective expertise is conceived as including significant and complicating sociological influences, arising from both individual and contextual factors (Martinovic, 2009). Accordingly, in contrast to progressively staged or linear models, it has been proposed that behaviour may oscillate between more expert-like and more novice-like performances depending on the nature of a situation, or the impact of change (Grenier & Kehrhahn, 2008).

Orland-Barak and Yinon (2005) found evidence of fluctuations in the performance of expert mentors within education, associated with adopting altered roles within the same domain. Similarly, Martinovic (2009) in investigating mathematics teachers who were also online tutors, claimed expertise is the product of an interaction between the person and the environment, and reports that most tutors occupied transitory positions on a novice-expert continuum, with more or less expert-like behaviours displayed dependent on the context encountered.

Moreover, Gegenfurtner (2013) described transitions in expertise, whereby changes in work context may compel the individual to regain expert status, stimulate increased performance via positive adaptation, or cause lowered performance due to lack of adaptation. This supports the notion that expertise may be greatly affected by, and sensitive to contextual changes, rather than featuring a presumed stability or attained end state. Hence, assumed transfer of expertise to even closely matched contexts may be erroneous, and educational support may be required in facilitating experts to effectively adapt their expertise to changed circumstances encountered (Martinovic, 2009). Thus, expertise may be more contingent and complex than previously appreciated.

A key message here is that it is folly to attempt to oversimplify what may only be appropriately comprehended by appreciating its full complexity. Nunn (2008) concluded that expertise is temporary, dynamic, contextual, multidimensional, interdisciplinary (i.e., attainable in many disciplines, and may be viewed from many perspectives), and complex. If we consider that the sports coach is enmeshed in a domain further complicated by its interpersonal nature (Shanteau, 1992), which demands great flexibility and adaptation of practitioners (Saury & Durand, 1998), and is both contested and power ridden (Potrac & Jones, 2009), then we begin to sense how turbulent the developmental journey towards expertise might be for individuals, and how this may cause fluctuations in self-perceptions of their own expertise, rather than an unproblematic linear or staged progression, as suggested in some literature, and often portrayed via coach education schemes. Notwithstanding, recent insights from expertise literature offer a framework for an enhanced comprehension of what it means to be, and remain expert-like. They shift the emphasis from the expert as a product, to expertise as an ongoing process (Turner, Nelson & Potrac, 2012); and

allow greater recognition of socio-cultural influences upon expertise, while reinforcing the importance of agency (Hatano & Oura, 2003).

1.2 Aims

The aim of this study is to explore how self-perceptions of expertise (among the participating) expert-like sports coaches may develop, regress, and redevelop over time within the context of sports coaching, in the light of recent theoretical reconceptualisations of expertise, expertise development, sports coaching, coach development, and adult learning.

1.3 Objectives

To undertake longitudinal interpretative research, using multiple case studies, and adopting a combination of life history and life course approaches, in exploring the developmental journeys of expert-like sports coaches. Qualitative methods will be employed, with the utilisation of written narrative accounts, and repeated semi-structured interviews (six per participant over two years), particularly focussing upon critical incidents relating to coach development and perceptions of coaching expertise, in order to provide rich thick description (Geertz, 1973; Thomas, 2010) of experiences, interpretations, and feelings over time.

To employ a narrative inquiry approach, to explore and apprehend expert-like coaches' lived experiences, and the way in which they make meaning and derive understanding from them, through the stories they recount and identify with (Bruner, 1990; Smith, 2007). Bruner (1986) proposed we all live storied lives, and McCarthy (2007) claimed we operate within a world shaped and represented through narrative ways of knowing. Thus, Smith (2007) asserts that stories are both personal and social, and have the capacity to affect others. This is hence an interpersonal qualitative methodology involving knowledge generation and transfer, via the collecting, (re)telling, analysing, and (re)interpreting of stories (Etherington, 2004; Leavy, 2009).

Given the interpersonal element of this study, and the co-constructed nature of the storied outcomes, reflexivity will be intertwined throughout the research process, in relation to both the researcher and the participants, to not merely notice what we noticed, but also to notice how and why we noticed it (Moss & Barnes, 2008). In this

way we may strive to be as transparent as possible about our potential assumptions and influences (Pillow, 2010), and our associated learning and adaptation over time in the context of a longitudinal study. So, here, a form of critical meta reflection upon the research process is adopted as being potentially beneficial in regard to heightened awareness, and meaningful questioning, of how and why knowledge for understanding was produced (Plummer, 2001; Riach, 2009).

1.4 Theoretical Frameworks

There are two main theoretical frameworks employed in this study. Firstly, the review of literature (see Chapter 2) will detail and reveal a new wave of literature and research across sports coaching, coach development, expertise development, and adult learning, that shares remarkably similar messages regarding a more complex and holistic perspective on matters, and common directions in terms of shifts of emphases (e.g., universal truths → contextual contingency), that could usefully inform the study (see also Chapter 3).

Secondly, this study will draw upon Bourdieu's key concepts of social theory (introduced in Chapter 2) – specifically the interlinked thinking tools of *habitus*, *field* and *capital* (Melville, Hardy & Bartley, 2011) - in potentially providing insight in the interpretation of data (in Chapter 5) relating to the lived experience of expert-like coaches.

Bourdieu's thinking tools seem particularly useful in apprehending the social complexity and dynamic change inherent in sports coaching (Cushion & Kitchen, 2011). Specifically, I believe that they have the potential to facilitate an enhanced apprehension of the dynamic interplay between the embodied histories of coaches, the coaching contexts within which they work, and the relative sources and exercises of power therein. Hence, a Bourdieusian sociological lens has been more commonly applied to the study of coaching in recent years (e.g., Claringbould, Knoppers & Jacobs, 2015; Lewis, Roberts & Andrews, 2015; Townsend & Cushion, 2015), promoting a holistic interactional theory of practice (Grenfell, 2008a), although such an approach to the consideration of coaching expertise is, as yet, rarer and indirect. Furthermore, Bourdieu's concepts seem to offer a promising means of capturing the

richness of lived experience, and of encouraging a reflexive discourse (Cushion & Kitchen 2011).

1.5 Research Questions

To achieve the aims of this research the following research questions were formulated, principally derived from the review of literature that follows this chapter, and influenced, at least in part, by my personal experiences of expertise development within sports coaching and education (see Reflexive Interludes included in this thesis²).

- To what extent does perceived expertise fluctuate in the developmental journey of expert-like sports coaches?
- What are expert-like coaches' experiences of fluctuations in their perceived expertise?
- How do expert-like coaches learn and adapt in response to fluctuations, and what are some of the outcomes for coaching practice and coach development?
- What constitutes contextualised valuable learning in the perception of expert-like sports coaches?
- How might the ongoing learning and (re)development of expert-like coaches be better supported and facilitated?
- Are there common behaviours or qualities supporting the promotion of perceived expertise among expert-like coaches?

1.6 Importance of Study

There seem to currently be misconceptions and simplistic assumptions about expertise and expertise development. Expertise may be far more complex than formerly portrayed (Nunn, 2008). Our consideration of coaching expertise needs to embrace the role of context, and the influence of change upon ongoing and recursive (re)development (Grenier & Kehrhahn, 2008). While staged models may be useful in monitoring general progress towards expertise: "...they do not describe in any detail the process by which an individual moves from one stage to the next ..., the specific

² The four reflexive interludes are autoethnographic in nature, and may be useful in illuminating my own positioning in relation to this research. They are interwoven after each of the first four chapters of this thesis.

influences on the process, or the continuation of expertise development.” (Grenier & Kehrhahn, 2008, p.4). However, a longitudinal exploration of the lived developmental experiences of expert-like coaches might provide such detail regarding the process and continuation, and a useful contribution to knowledge.

Expertise is essentially complex, unstable, and contingent upon contextual change, and, therefore, linear models do not adequately reflect the dynamic nature of interpersonal domains (Shanteau, 1992), such as coaching. We need to shift from attempting to describe expertise, and squeeze it into restrictive definitions and typologies, towards a more realistically complex understanding of expertise adaption and redevelopment. Coaching seems a domain well suited to the reconsideration of expertise. Telling the stories of the lived developmental experiences of expert-like coaches might provide an authentic portrayal of messy reality, and a useful contribution to knowledge. Moreover, an in-depth longitudinal and holistic academic study of the developmental journey of expert-like coaches has yet to be undertaken.

This represents a paradigmatic shift from the expert coach as a product, to the evolution of coaching expertise as a process; from coaching expertise as an attainable destination, to an unending journey of ongoing professional discovery (Turner et al., 2012). If there is a road to expertise, it is lengthy and convoluted. Tracking the fluctuations in perceived expertise in the developmental journey of expert-like coaches holds promise to be insightful in this regard. The issues raised and stories revealed might produce an accessible holistic picture that other practitioners (who aspire to become expert-like) can connect with, and draw guidance from, in potentially informing their own flourishing (Reason, 1996). Furthermore, the study might provide a useful contribution to our knowledge of how expert-like coaches can be supported and facilitated in their ongoing learning and (re)development.

1.7 Overview

Chapter 2 will be a review of literature that will necessarily feature some broad brush strokes in relation to large foregrounding areas of concern (such as expertise, sports coaching, and learning), but will also focus in on specific sources, concepts and theories pertaining to this study (such as Grenier and Kerhahn’s (2008) Model of Expertise Redevelopment, learning as becoming, and phronesis). Chapter 3 will

outline and justify the methodology and methods employed in the study. Chapter 4 will present the findings, which essentially will represent the stories of the coaching life histories of the participants, with a focus upon expertise development. Chapter 5 will discuss the potential meaning of the findings, and their relation to the research questions and theoretical frameworks, before offering preliminary thoughts on the plausibility and pursuitworthiness of theoretical notions arising, via abductive reasoning (McKaughan, 2008). Chapter 6 will conclude with a reflection upon the methods utilised, a summary of what the study has achieved, and a consideration of my own experience of undertaking the study.

Reflexive Interlude 1 – Epiphany in a Milkfloat

The following autoethnographic section may be considered a response to Etherington's (2004) call for a reflexive consideration of how the researcher's own life history has led them to an interest in the topic of study. Here I shine a light on how I initially came to consider working in the education sector.

It is the early 1980's, and I am twenty-one, driving an electric milk float through the busy streets of the West End of London. It is a bitterly cold Winter afternoon, when darkness descends early. In the queuing traffic a Black Cab driver winds his window down and asks sardonically "*Are you f***ing lost mate?*", and laughs. He is wondering what a milkman is doing driving around so late in the day. He doesn't know I'm a run out wholesale milkman (I basically deliver stuff others have forgotten to deliver, or take top up loads of dairy products to big supermarkets or restaurants). But such a probe, from someone so intimately connected to the streets, is tantamount to questioning my manhood, and the hidden meaning is not lost on me. I can't be bothered to respond, it has been a long day (I still start much earlier than most workers), and the batteries are not just getting flat on the float (funnily enough I have a recurring dream to this day about desperately trying to get home, in a milk float whose battery power is steadily ebbing away) . I make a face that says "*Really funny!*", but means go forth and multiply, and stare back out at the deepening gloom through a scratched plastic windscreen.

This is my first serious(?) full time job. All I've done apart from this is bar work, briefly managing my cousin's rowdy pub in Camden Town (while he slowly loses a fight with cancer upstairs), where I quickly learnt the art of how to throw nutcases out of the door, and some unlikely work as a film extra in the Greek Islands. A few of my mates have gone into the music industry, and made tentative overtures to me about getting involved in some way in their burgeoning success, and the associated fashion scene. But it's not for me really – seems too pretentious, and transient, and not where my talents lie anyway (where do they?). Plus I've started to drift away from friends anyway (or they have drifted away from me?), as I'm one of the few of us in a serious(?) relationship at such a tender age.

My heavily pregnant girlfriend is living with me at my parent's council flat. It's unanticipated, tense and daunting. I've gone for the only full time job I could quickly get into, and set about building up some savings for the battles ahead (baby, first home, etc.). My prospects are not great employment wise because my school exam results were disappointing. I had gained a scholarship at grammar school, and passed 9 'O' Levels in my mocks. Only to disastrously discover at the same time nightclubs, recreational drugs, and the opposite sex, all before my finals (only four 'O' Levels realised). Despite something of a recovery at Sixth Form (another 'O' Level and two 'A' Levels), I am under qualified, lacking in confidence, and a bit of a lost cause. I haven't got a clue what I want to do, (the careers officer said I could be an archaeologist or a librarian! *Whoopy do!*), and the social whirl of successively becoming a soul boy, a punk, and a new romantic, have come to an abrupt halt.

Life now seems dull and heavy with responsibility. It feels like the sky is full of clouds so dark they might fall and crush the earth. The world seems to be passing me by. The job is low status. Quite often I deliver to posh restaurants (by the tradesmen's entrance of course), and once I had to take a single pint of forgotten milk to 10 Downing Street! Strangely, I had to deliver that through the front door – I don't think terrorism was on the radar then. My parents had run a successful pub when I was younger, and had pioneered early pub food, before the local road system altered to ruin their passing trade, and they had been forced into an ignominious retreat to council housing. I had briefly been interested in politics myself, given my success in studying history, but as a surly teenager I had rejected my Mother's pleas to consider going to university to continue studying. Such juxtapositions only served to fuel my sense of isolation and loss.

And so, as the snow starts to dust the windshield, and bitter winds whip the dry flakes around my stiff feet in the doorless cab, I face the darkness that is my potential future, and take grim stock. I have done the job for 8 months now. I have attacked the rounds in all inventive possible ways, explored each possible route, and experimented with all potential methods of managing the workload. No challenge remains, just a remorseless *more of the same* stretching inexorably into a swallowing future perspective. My donkey jacket stinks of stale milk. I imagine the smell penetrating my skin over the years, becoming an unwanted part of me. *There has to be something*

more I say to myself. What am I good at? What else could I do? What do I enjoy? What might be an interesting challenge? I need to think my way out of this.

Slowly positive leads bubble to the surface. I have always loved sport, and achieved reasonably well in that. Sport has also been a kind of social lubricant for me, allowing me to mix with different others more easily, and gain status above my working class roots (Dad had been a coalman before the pub). On reflection education had done the same. Achieving the grammar school scholarship had been a big deal, and despite me wasting some of my opportunities, I still valued education and could see it as viable means of bettering one's position in society (on reflection I find it interesting that people had developed high hopes for me due to my early educational successes, but were also then very swift to accept that I had blown it, and settled for a more limited life. It was as if such an outcome was always likely for *the likes of me*. A self-fulfilling destiny. Merely an illusion of possibility). I also had found I liked helping others to improve. And I had some inspiring negative examples from my own teachers – I could certainly do better than that! “*You’re all going to fail.*” my history teacher had cruelly announced to the ‘O’ Level class; so, while vulnerable others were crushed around me I resolved to get an A grade. I had already gained some early experience of coaching football with local kids, and found it enjoyable, but a lot more difficult than I anticipated (a worthy challenge that stimulated my curiosity). I came to a sudden epiphany that I wanted to teach.

Education seemed a win-win, whereby I could (eventually!) improve my own and my family's outlook, and potentially make a positive difference in the lives of others. I briefly considered History, but settled quickly on Physical Education, as a much sexier subject. My decision did not go down well with those in my immediate circle. They were incredulous – “*You can't do that!*” “*You won't get through it!*” Never a good thing to say to me, after the History class incident. They were trying to put out a fire by throwing petrol on it. A small part of me did wonder how the hell I was going to get to, and through, teacher training in my circumstances (and with my recent track record of study), and recognised the ridiculousness of giving up a well-paid job with a baby on the way. But for the greater part the batteries were now getting seriously recharged.

Chapter 2: Literature Review³

2.1 Expertise

2.11 An Introduction to Expertise

Academic interest regarding expertise has grown over five decades (Germain & Ruiz, 2009), with an enhanced understanding of expertise viewed as important in debating the connotations for particular fields, and potentially providing enhanced insight into the nature of specific domains themselves (O'Sullivan & Doutis, 1994). Herling (2000) claimed that determining a greater comprehension of expertise is fundamental for effectively utilising human resources, and facilitating efficient personal development; for example, it may elicit implications for employment, development, and education.

In regard to sports coaching, Bell (1997, p.34) proposed that an appreciation of: "...the road one walks in becoming an expert⁴." might be of significance in assisting others to pursue improvement. Likewise, McCullick, Cumings and DeMarco (1998) proposed distinct stages of expertise development, and presented a road map, and directions (in the form of recommendations), to guide coaches towards expert status. But the analogy of a known route towards expertise may be overly simplistic, and promoting expert status is likely to entail more than merely pointing novices in the right direction. For instance, Mallett (2010) reported that research has revealed substantial variation in the developmental pathways of high-performance coaches.

Expertise is a widely employed, commonly applied, term. Nevertheless, while often implicitly accepted, the notion of expertise has received relatively scant explicit attention, meaning it may easily be misapplied, or misinterpreted, based upon assumptions. For example, Dreyfus and Dreyfus (2005) argue, in contrast to previous conceptions, that experts do not follow internalised general rules for dispassionate reasoning, but operate on a situational case based approach that is both emotionally embodied and intuitive. Similarly, some experts may be disregarded as simply innately talented, instinctive, or very experienced; whereas research has revealed that

³ See Appendix A for a conceptual map of the Literature Review structure.

⁴ As per Germain and Ruiz (2009) the terms 'expert' and 'expertise' are used interchangeably in this thesis, since they are semantically linked, with the former derived from the latter.

extensive practice, study and understanding are all essential conditions for expertise (e.g., McCullick et al. 1998; Rutt-Leas & Chi, 1993). Nonetheless, despite considerable academic investigation and theorising, a broad consensus as to what an expert is remains elusive (Berliner, 2001; Herling, 2000), making confirmation of expert status a contentious matter (Nash, Martindale, Collins & Martindale, 2012), and, thus, guidance based on expert developmental profiles problematic.

Berliner (2001) claimed definitional difficulties are prominent in studies of the expert, while Nunn (2008) observed even experts on expertise are not able to agree on a definition, and Hoffman, Shadbolt, Burton and Klein (1995) speculated there may be nearly as many definitions as researchers studying experts. Nonetheless, common elements from established expertise theories could provide guidance on the broad boundaries and parameters of the concept (Herling, 2000). Although ambiguity remains, in that expertise can mean different things to different people (O'Sullivan & Doutis, 1994), or in different contexts (Germain & Ruiz, 2009; Grenier & Kehrhahn, 2008; Nash et al., 2012).

Despite the need for clearer conceptualisation and greater consensus, we are plainly able to recognise experts by their comparative differences in specialised action (Hoffman, 1998), and can patently distinguish outstanding consistent performers (Schempp, 2000). Hence, Martinovic (2009) asserts that experts display characteristics which elevate their performance, and are superior overall. Similarly, Ericsson and Charness (1994) claim that practitioners must demonstrate superior performance in order to be perceived as experts. That is, we think we know who the experts are, even in the absence of an established definition. The folk view of expertise tends to ascribe expert status when associated with great experience and/or accomplishments (Rutt-Leas & Chi, 1993), and in numerous studies the identification of experts relies on similarly subjective judgements from persons in supposedly informed positions (Nash et al., 2012).

Notwithstanding that it may be unfeasible to entirely formalise a definitive specification of the characteristics of, and criteria for, expertise, Benner, Tanner and Chesla (2009) urge us to continue to investigate and learn from expert practice. This is because experts might serve as inspiring role models (Schempp, 2000), whose practices could

be studied, drawn upon educationally, or replicated to some extent in professional action, in order to promote enhanced practitioner effectiveness (Benner et al., 2009). At the very least, identifying and observing experts ought to make possible a reduction in the randomness of novices' learning episodes, as they seek better ways to do things, in an element of positive apprenticeship (Dreyfus & Dreyfus, 2005).

Troublingly, contemporary developments within formal coach education appear to be principally centred on threshold competencies (Abraham, Collins & Martindale, 2006; Nelson, Cushion & Potrac, 2006), to be demonstrated at certain levels (Nash et al., 2012), seeming to emphasise specific outcomes or products, or a restricted range of skills (Bergmann-Drewe, 2000), and potentially featuring a limiting and static quality (Herling, 2000). More emphasis upon the intentional cultivation of expertise would, contrastingly, accentuate the process or journey, and instead promote a dynamic expanding quality (Herling, 2000).

Since sports coaching has come to be largely recognised as characterised by uncertainty and complexity (e.g., Jones, Bailey & Thompson, 2012; Jones et al., 2010), expertise is requisite to positively adapt and be responsive to change, beyond the bounds of mere competence. For example, in a study of expert sailing coaches, Saury and Durand (1998) found their practice was highly adaptive and flexible, based on constant fine-tuning to the unfolding context, such as variations in the psychological or physical condition of athletes, and changes in emotional states. Herling (2000, p.19) maintains generally that: "Organisations must look beyond competence and focus on the development of expertise as a desired outcome in the process of improving performance."

Grenier (2005) discovered that although formal learning was sufficient to cultivate competent museum attendants, the addition of informal and incidental learning was necessary to promote further development towards expertise. Herling (2000) asserts that, as competence features task-specific actions, it is best viewed as a subset of expertise⁵; while expertise, although recognised as domain specific, may continue to

⁵ In presenting a five-stage model building towards expertise Dreyfus and Dreyfus (2005) place *competence* as only the third stage, and claim that this features a relative lack of refined embodied

extend or grow into related areas, reinforcing its importance in improving performance further, and facilitating transfer to novel (but related) situations in the process of ongoing development. An implication of this is that expertise is dynamic and tending towards expansion. Yet, although Herling (2000) recognises expertise as complex and multifaceted, he neglects to envisage that as experts expand into new areas, and encounter fresh challenges, their very status as experts may be threatened due to fluctuations in the context within which they operate, as some previous learning becomes redundant or less meaningful. To explore these possible fluctuations in more detail, we first need to visit the broad boundaries and parameters of expertise.

To summarise, understanding expertise may be important in helping others to improve, but, consensus on what an expert is, and confirmation of expert status is problematic, and variation is apparent in the developmental pathways of sports coaches. Nevertheless, we can point to those who seem to be experts, and may act as inspiring role models; plus, expertise (beyond mere competence) is required for flexible and adaptive practice, and to promote a dynamic expanding quality of ongoing development. To consider the broad parameters of expertise, we now turn our attention to the components of expertise.

2.12 Components of Expertise

Germain and Ruiz (2009) attempted to unearth the components of the expertise construct (i.e., a complex idea, made up of an amalgamation of simpler elements), by gathering and comparing perceptions of expertise held by human resource development scholars in USA and Europe. Based on common themes a cross-national definition was offered: “Expertise is the combination of knowledge, experience, and skills held by a person in a specific domain.” (Germain & Ruiz, p.629). However, this was no revelation given that the authors stated from the outset: “...the common definition used in those countries proposes that expertise has three dimensions: knowledge, problem-solving skills, and experience.” (Germain & Ruiz, p.616). Furthermore, previous literature had identified analogous components (e.g., Herling, 2000; Herling & Provo, 2000; Swanson & Holton, 2001), and since the participants

situational discrimination in regard to recognition of issues, and an absence of an intuitive feel for what is required, compared to more advanced practitioners.

were academics, the writers' observation that responses seemed to be greatly influenced by literature is unsurprising. Moreover, participants did not provide explanations regarding the amount of knowledge, type of experience, or kind of skill thought to be required of experts. Nonetheless, Germain and Ruiz's (2009) conclusions tally well with Schempp and McCullick's (2010) observation that knowledge, experience, and skill consistently emerge from research as contributing to expertise.

Germain and Ruiz (2009) claimed that the research question, "Does the construct of expertise include a self-enhancement or a behavioural dimension?" (p. 627), was partially supported in their study. However, this could be considered tenuously supported, with at best merely pointers to a possible broad set of attitudes and behaviours supporting expertise, as suggested in the earlier work of Germain (2006b), such as self-assurance. Nevertheless, interestingly, a quarter of English participants emphasised the personal characteristics of experts, such as emotional commitment (Germain & Ruiz, 2009).

The authors concluded it is important that: "...future research begins to develop appropriate and valid measures of the expertise perception phenomenon to begin quantitative assessments as well as qualitative ones." (Germain & Ruiz, p. 629). However, it is doubtful whether expertise is defined strongly enough yet to allow for reliable quantitative measures, and whether it has received sufficient preliminary exploration in specific domains (such as coaching). For instance, as well as common themes, Germain and Ruiz (2009) also uncovered variation in how the components of expertise were defined across countries. So, it could reasonably be speculated that they may also differ considerably across subject domains too. Indeed, in their results domain specificity was presented as a fourth dimension; but, it seems more plausible to me that this represents the context within which expertise is situated, rather than a component of expertise per se. Nonetheless, Germain and Ruiz's (2009) work suggests that a qualitative exploratory approach is appropriate in the study of a topic such as expertise, where more investigation is required, and the understanding of perceptions is the principal concern (notably, they recommend that interviews are utilised in subsequent studies).

Skill was perhaps the most uncertain component in Germain and Ruiz's (2009) investigation, as it was loosely defined, seemed to represent different things to different people, and was alternatively referred to as problem solving skills by subjects. In an earlier effort to outline the basic components of expertise, Herling (2000), drawing upon previous expertise literature, lists problem solving, along with knowledge and experience, and emphasises that these components are contingent upon one another. That is, each is necessary for expertise, but not sufficient in itself, and interacts with the other components (see Figure 1).

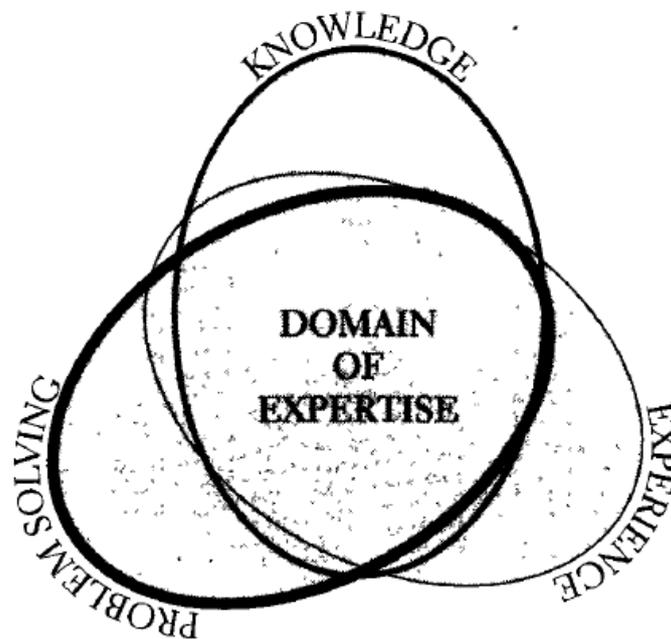


Figure 1. The Interactive Basic Components of Expertise (taken from Herling, 2000, p.13).

It seems safe to claim that all experts will be experienced, knowledgeable, and skilled problem solvers (Herling, 2000)⁶. But, at different times, and in different circumstances, the relative importance of each for expert practice will be likely to vary, the balance to shift, and the comparative influence be altered. Herling (2000) claimed that each of these components is measurable (although he did not detail how exactly), and he asserted that a definition of expertise could be derived from them.

⁶ As to whether one component should be titled 'skill' or 'problem solving', I would assert the latter may be most appropriate, since none of the specific examples of 'skills' identified in the expertise literature so far, could not be reasonably accepted as part of 'problem solving'. For example, critical thinking or communication. Furthermore, problem solving is certainly very applicable to practice within coaching.

To summarise, knowledge, experience, and problem solving skill emerge from literature as the interacting principal components of expertise, although they could also be underpinned by a broad set of facilitative behaviours and attitudes. It appears that explanations and characterisations of the components might vary across different settings, and the relative importance of each may shift according to circumstances. We will now consider some proposed definitions of expertise.

2.13 Definitions of Expertise

Germain and Ruiz's (2009) definition seems unsatisfactory, in that it employs the components of expertise (i.e., what makes up an expert) in an attempt to define what an expert is (i.e., what an expert does), when the sum is likely to be greater than the parts. Herling's (2000) definition (later also adopted by Swanson & Holton, 2001) may be more useful in that it refers to what characterises the expert in action, and associated perceptions regarding outcomes: "Displayed behaviour within a specialised domain and/or related domain in the form of consistently demonstrated actions of an individual that are both optimally efficient in their execution and effective in their results." (p. 20).

Kuchinke (1997) observes that expertise often reflects a socially agreed value judgement, and has been defined principally around perceptions of superior performance. He states:

"Someone who has expertise is typically seen as highly skilled and knowledgeable in some specific area, is presumably dedicated to keeping up-to-date, through practice and continued learning, and has a high level of commitment to the area or domain of expertise." (p.73).

Here, is reference to the requirement of a positive attitude towards further development from the expert, indicating that while performance may be superior, it is not automatically maximal nor sufficient. Accordingly, Johnson (1987, cited in Kuchinke, 1997, p.74) declares: "Expertise can most simply be defined as highly adaptive behaviour." This intimates the expert needs to be responsive to change, and, thus, expertise features plasticity.

Kuchinke (1997) also critiques definitions of expertise; for instance, he cautions that an emphasis on what experts do, may limit our comprehension of expertise development processes. Furthermore, he recommends expert behaviours should be uncoupled from their outcomes in research, since constraining factors such as organisational norms can mean that: “Expertise may or may not be effective or efficient within a given context.” (p.75). Swanson’s (1994) definition of expertise may offer more leeway in terms of being able to encompass that an expert might not always be able to perform at superior or maximal standards due to contextual or developmental constraints, and that they could also be subject to the expectations of others: “The optimal level at which a person is able and/or expected to perform within a specialized realm of human activity.” (p.94).

Drawing these definitions together, I would offer the following amalgamations:

‘Expertise may be defined as the optimal level at which a person is able and/or expected to perform, within a specialised domain and/or closely related domain, given contextual and/or developmental constraints.’

‘An expert tends to display highly adaptive behaviour, and employs a dynamic combination of knowledge, experience, and problem solving skills, as well as a commitment to ongoing practice and learning related to the domain, in order to promote effective and efficient performance that is generally superior.’

But, even if such definitions were broadly accepted, they offer little guidance as to how expertise may be developed, the nature of the developmental journey, and how experts operate on a day-to-day basis. For consideration of that we turn to how research into expertise has developed, thus far, and proposed theories of expertise.

2.14 Broad Research Traditions and Theories of Expertise

Cognitive theories of expertise emerged from early research on chess players (e.g., de Groot, 1966; Chase & Simon, 1973), and are essentially concerned with how experts solve problems, and handle information (Herling, 2000). Some key cognitive

characteristics of experts were established from this approach, such as that experts generally have more knowledge, employ information differently, and problem solve more rapidly (Kuchinke, 1997).

From an artificial intelligence perspective, a knowledge engineering approach to expertise study evolved, which concentrated upon how human expertise might be simulated (Farrington-Darby & Wilson, 2006). This centred on developing models emulating how experts think. Resultant representations described how information is acquired, the organisation of knowledge, the use of explicit and implicit knowledge, the distinction between domain knowledge and task knowledge, and how expertise to solve complex problems may be distributed among several persons in social cooperation (Herling, 2000). However, there is a growing realisation that there may be no one best way of operating as an expert, and that the relative meaningfulness of information, and use of creativity in solving problems, are significant complicating factors that need to be taken into consideration (Kuchinke, 1997).

Expertise research later expanded into general (e.g., human resource development) and specific (e.g., education, medicine) occupational fields, and contributed further to our understanding. But, there remains no broad consensus as to what an expert is, and the concept of expertise remains ambiguous. Much expertise research has been narrowly domain or occupation specific, or firmly from the viewpoint of one particular research tradition (Nunn, 2008). In one strand expertise is considered internal, in that it is a reward for an individual's assiduous practice, in another external, in that expertise is situated within, and adapts to, a collaborative community, and is subject to socio-political influences (Nunn, 2008). Thus, related but disconnected traditions approach expertise from different perspectives, though it may well be that there is no single best view that accounts for the full complexity of expertise, and cross domain dissimilarities (Nunn, 2008).

Nevertheless, as Herling (2000) asserted, common elements in established theories of expertise, may still act as a guide to the broad qualities bounding the construct. For example, he concludes that: - Expertise is *dynamic*, in that it is underpinned by a process of constant learning, featuring the ongoing attainment of knowledge, continuous reorganisation of information, and progressive problem solving (Herling,

2000). Expertise is also *domain specific*, in that comprehensive specialised knowledge is invariably requisite for excellence, and that most research signals that expertise in one domain is not easily transferable to another (Herling, 2000). Germain (2006a) moreover illustrates (see Figure 2) that expertise research has evolved from an emphasis on generalisable information processing heuristics, through proposed rules for rapid problem solving, to a more dynamic view encompassing socio-emotional elements (for instance, EQ Skill in the third wave refers to Emotional Quotient)⁷.

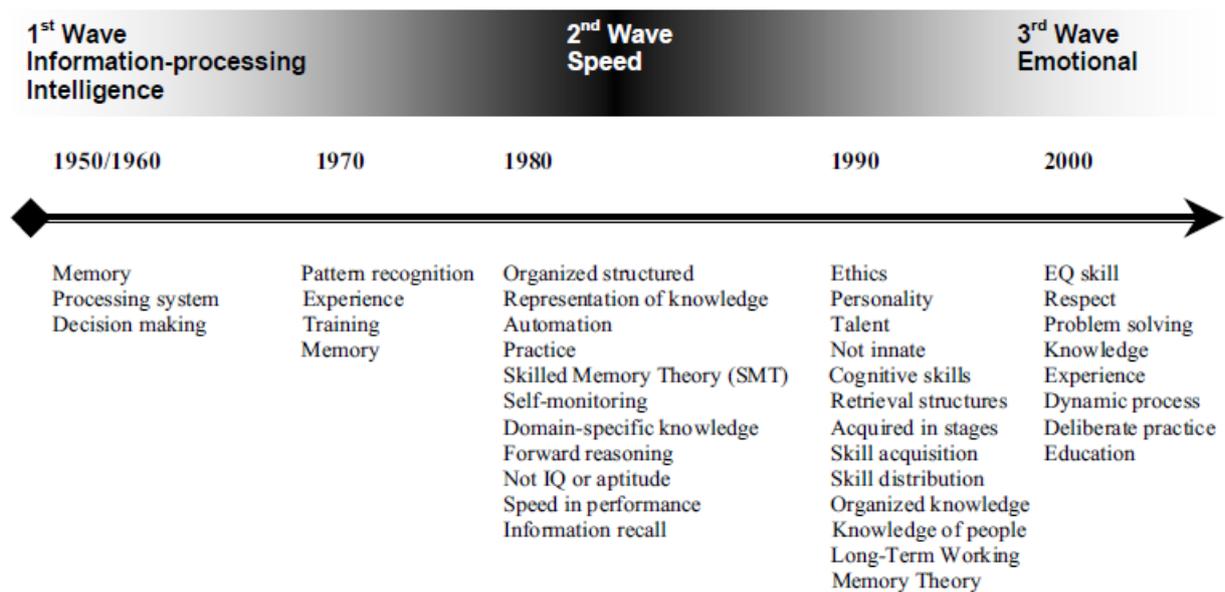


Figure 2. Waves or Generations of Expertise Research and Key Terms (taken from Germain, 2006a).

As previously indicated expertise also features certain common components (notice that knowledge, experience, and problem solving appear at the cresting wave above), and the cultivation of these is broadly accepted to be the result of a developmental journey. According to Chi (2006) expertise has been studied in two general ways: investigation of the qualities of exceptional individuals, identified via various indices of expert performance, or absolute approach; and the comparison of experts to nonexperts, or relative approach. The former may be criticised in regard to the rigour and consistency with which experts are identified, especially as no commonly agreed definition is established. The latter relies less on a clear-cut definition of expertise,

⁷ Germain (2006a) indicates that the second wave of research was compromised by findings that experts did not always achieve superior results despite superior abilities, that some knowledge *is* able to be transferred to new domains, and that using expert rules to instruct novices did not necessarily result in enhanced performance.

since it is easier to identify those who are more expert-like relative to more novice-like on a conceived developmental continuum (Chi, 2006). From early on, expertise development was commonly conceptualised as a continuum, ranging from novice to expert status, and featuring linear progressive stages (see Table 1). That is, these theories tended to emphasise staged expertise development (Gegenfurtner, 2013), and the acquisition of associated capacities along the way (Grenier & Kehrhahn, 2008).

Table 1. Selected Expertise Development Models Featuring Linear Progressive Stages.

Author	Context	Stages (Novice ↔ Expert)					
Fitts (1964)	Skill acquisition	Cognitive		Associative		Autonomous	
Dreyfus and Dreyfus (1986)	Expert skill acquisition	Beginner	Advanced beginner	Competent	Proficient	Expert	
Berliner (1994)	Education	Beginner	Competent	Proficient		Expert	
Hoffman (1998)	Defining expertise	Novice	Initiate	Apprentice	Journeyman	Expert	Master

Regardless of the developmental stages through which they might progress, researchers have suggested an investment of ten years or ten thousand hours of deliberate practice are necessary to become an expert in any domain (Ericsson & Charness, 1994). Earlier studies suggested a more substantial commitment was necessary (e.g., Chase & Simon, 1973); others emphasised that ten thousand hours

may merely represent a minimum threshold (e.g., Herling, 2000), and that the quality of the experience is more crucial than the quantity (Ericsson et al., 2007). Certainly, experience alone is no guarantee of expertise (Saury & Durand, 1998), since coaches must also deliberately reflect upon, and derive meaning from their experiences, and apply lessons learned in refining their practice (Trudel & Gilbert, 2006). That is, a quality of mind, or attitude to continuous learning, is necessary for the cultivation of expertise, beyond mere hours accumulated⁸. Hence, personal qualities, such as commitment, and receptiveness to developmental opportunities, may act as enabling factors in expertise promotion. Accordingly, Dreyfus and Dreyfus (2005) contend that one cannot progress towards expert status without being emotionally involved in our choice making, and willing to take risks and learn from mistakes.

Expertise patently necessitates superior acquaintance with a particular body of knowledge, and the cultivated ability to adeptly apply this in challenging practice. However, it also requires that individuals care deeply about their field, to be sufficiently motivated to invest the considerable energy and effort needed to attain high performance standards. Furthermore, we must be exposed to, and willing to embrace, a level of opportunity in our lives, to be able to attain excellence; or, in the absence of such serendipity, be willing to create our own luck, by actively seeking out, or creating developmental opportunities. For example, whilst José Mourinho, one of the world's foremost football coaches, was fortunate to be born into a familial cultural setting which emphasised and valued the development of others (his mother was a teacher, and his father a coach), he also actively promoted his own growth by deciding to engage with formal educational courses (attending university and coaching courses), and proactively seeking out opportunities to assist accomplished mentor coaches, and undertake new coaching challenges in diverse national contexts (Barclay, 2011).

Commitment and fortune have been alluded to previously in relation to staged models (Dreyfus & Dreyfus, 1986), deliberate practice (Ericsson, 2003), and the general consideration of expertise development (Kuchinke, 1997). But, heretofore, affective, experiential, and contextual qualities seem to have largely been downplayed (Grenier

⁸ As Smith and Tiberius (1998) indicate experience can sometimes simply lead to a deepening rut, and it is the approach to new problems, beyond the habitual, that differentiates the expert. Indeed one could claim that the habit of the expert is to adapt to evolving circumstances encountered.

& Kerhahn, 2008). For example, Selinger and Crease (2002) attributed the finding that experts seem to derive more from their experiences than nonexperts, to superior memory, when this might be attributable to the expert caring deeply about an experience perceived to have strong personal meaning for them, and, thus, having a fervent desire to learn from it. In support of this, Dreyfus (2001, cited in Nunn, 2008, p.12) asserted that: “Only emotional, involved and embodied human beings can become proficient and expert”.

In discussing teacher expertise, Berliner (2001) proposed that expertise may be considered as an increase in agency over time. Whilst neophytes invariably require, or receive, assistance from ‘more knowledgeable others’ (Vygotsky, 1978), experts typically rely more on their own accumulated experience and knowledge, and have bootstrapped themselves to levels of development where self-reliance is a key feature (Berliner, 2001). That is, these are self-motivated, independent, largely autonomous beings. Hence, experts are always learning, forever in a constant process of change and improvement. Thus, expertise can be envisaged as an ongoing process of becoming, rather than something that can be fully mastered or realised (Nunn, 2008). Legendary basketball coach John Wooden may have been alluding to this when he suggested: “It is what you learn after you know it all that counts.” (Wooden & Jamison, 1997, p.198).

To summarise, traditional approaches to the study of expertise, and novice to expert staged linear models of expertise development, have been supplanted by a more dynamic socio-emotional perspective recognising the importance of fortune and a commitment to ongoing learning. This has been reflected in recent developments in expertise literature.

2.15 Recent Developments in Expertise Literature

Given that expertise may be envisaged as an unending journey, it is disheartening to realise no guiding route map exists. Nunn (2008) contends there is no single best view of expertise arising from the different research traditions and approaches employed so far; he argues that, given its complexity, expertise defies being condensed to a clear-cut definition, and little concerning expertise is straightforward. For example, while we now appreciate that all experts are highly experienced (Berliner, 2004), and

much practiced (Hatano & Oura, 2003), agency and context are also crucial developmental influences, thus far, underplayed (Martinovic, 2009).

Of late, developing theories have highlighted how an expert's performance may be facilitated or threatened by the context or environment within which they operate (Martinovic, 2009). For instance, how a coach is able to operate in practice might be affected by a 'win at all costs' approach within a specific sporting sub culture, or the extent to which their coaching philosophy is compatible with that of their employing organisation. From this perspective expertise is conceived as including significant and complicating social and sociological influences, arising from both individual and situational elements (Martinovic, 2009). These conceptions of greater interactional complexity and contingency contrast with staged or linear continuum models, in that they propose behaviour may oscillate between more expert-like and more novice-like performances depending on the nature of a situation, or the impact of change (Grenier & Kehrhahn, 2008). To this end, Jarvis (2006) contends that:

“Not everyone moves from novice to expert, some retreat and move on, or are moved, to another role so that they are no longer exposed to the same types of experience, but others ... ‘go through the motions of the action’ but do not learn anything from it.” (p.115).

Orland-Barak and Yinon (2005) found evidence of fluctuations in expert performance in studying critical incidents experienced by mentors within education, partially titled '*Sometimes a novice and sometimes an expert*'. Such disturbances seem to occur especially when experts experience a dynamic interaction of issues associated with adopting altered roles within the same domain. For example, in investigating mathematics teachers who were also online tutors, Martinovic (2009) notes that, “Expertise is not a characteristic of a person; rather, it is the product of an interaction between the person and the environment.” (p.168), and reports that most tutors occupied transitory positions on a novice-expert continuum, with more or less expert-like behaviours displayed dependent on the context encountered.

Moreover, Gegenfurtner (2013) described transitions in expertise, whereby changes in work context may either compel the individual to regain expert status, by stimulating

increased performance via positive adaptation, or cause lowered performance due to lack of adaptation. This supports the notion that expertise may be greatly affected by, and sensitive to contextual changes, rather than featuring an assumed stability or attained end state. Hence, assumed transfer of expertise to even closely matched contexts may be erroneous, and assistance may be required in facilitating experts to effectively adapt their expertise to changed circumstances encountered (Martinovic, 2009). Thus, expertise may be more contingent and complex than previously appreciated.

Nunn (2008) claims a network relational model (see Figure 3) best represents the nature of expertise, which he describes as temporary, dynamic, contextual, complex, multidimensional, and interdisciplinary. That is, Nunn (2008) contends expertise is most appropriately conceived of as an integrated system of connected components, clusters of which become relatively more important in particular situations, and each part featuring complexity in itself. This emphasises that expertise is more multifaceted and malleable than previously accepted. Thus, expertise is not considered as merely a difference relationship in comparison to others, but a set of differences dependent on the demands of the particular context, such that measurement by a general scale, or from a single perspective, seems unrealistic and unhelpful.

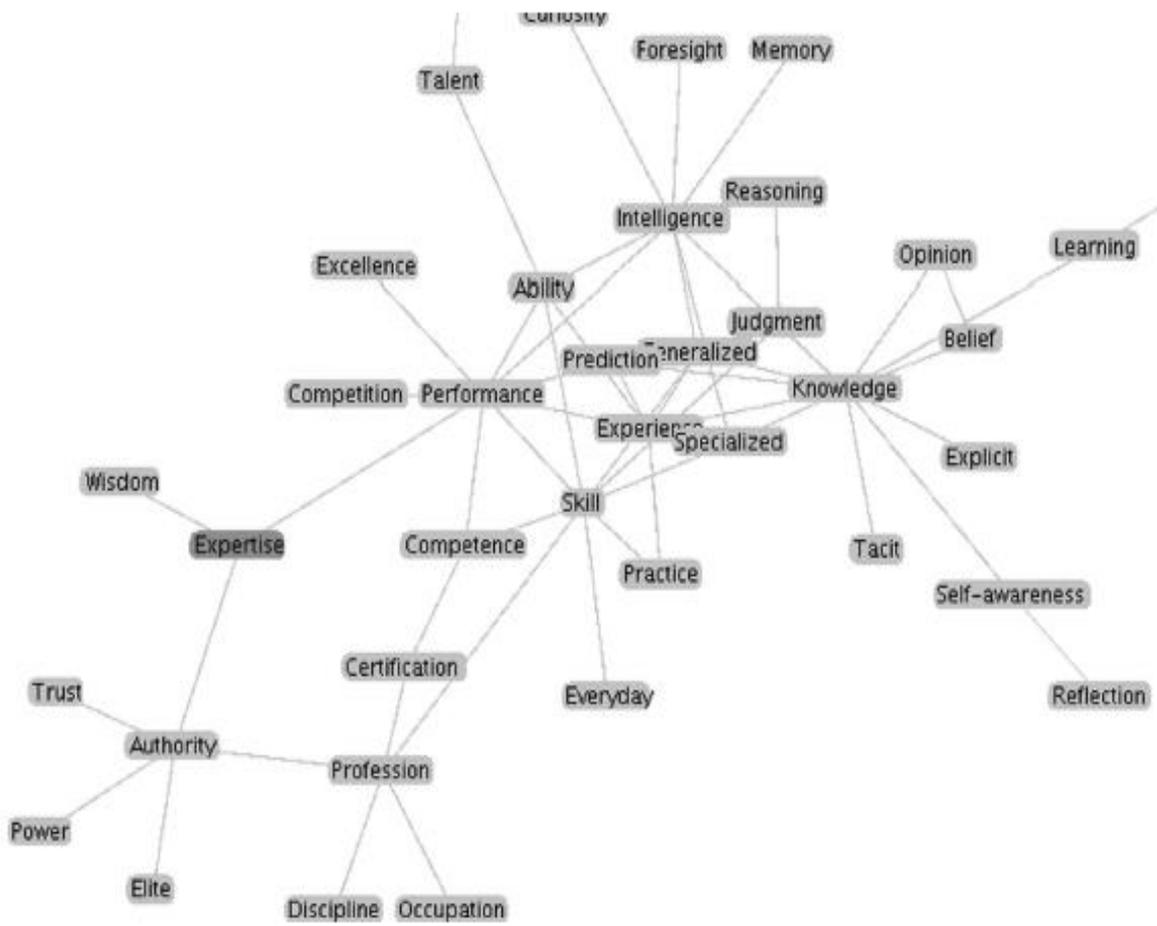


Figure 3. An Example of a Network Model of Elements of Expertise (taken from Nunn, 2008, p.2).

Nunn’s ideas infer expertise might best be considered in relation to non-linear dynamics⁹, and cyclical redevelopment (whereby expertise cultivation may need to periodically be revisited or reconstructed because of contextual change). In discussing the relationship between the nodes of novice, expert, and master, Nunn (2008) comments:

“It suggests that the process of expertise is an attractor with various stages circling around instead of progressing linearly. The literature of expertise rarely acknowledges that even experts and their teachers, the masters, must return for continuing education, and occasionally become novices to keep up with innovation, and some

⁹ A language with which to consider dynamical systems, wherein a small change in initial conditions may result in significant change of the whole system (Rasband, 1990).

experts and masters never recover their expertise and mastery when confronted with changes of paradigm or technology.” (p.6).

Likewise, Grenier and Kehrhahn’s (2008) Model of Expertise Redevelopment (MER) (see Figure 4) uniquely considers the impact of change upon expertise, and the interconnectedness among states of expertise redevelopment, and influencing territories. Unlike staged models of expertise, the MER may be useful in comprehending the difficulties of maintaining and adapting expertise in shifting situations, which occasionally compel experts to regress to more developmental modes, due to significant change in the territory of expertise within a domain (Grenier & Kehrhahn, 2008). This provides a promising framework for understanding the authentic complexity of expertise – specifically, its dynamic nature, powerful contextual influences, and the need for continual renewal or reinvention as the territory of expertise shifts. From this perspective, the cultivation of expertise is not a straightforward matter with a distinct concluding product – but an ever-changing cyclical process featuring continuous learning and experimentation (Grenier & Kehrhahn, 2008).

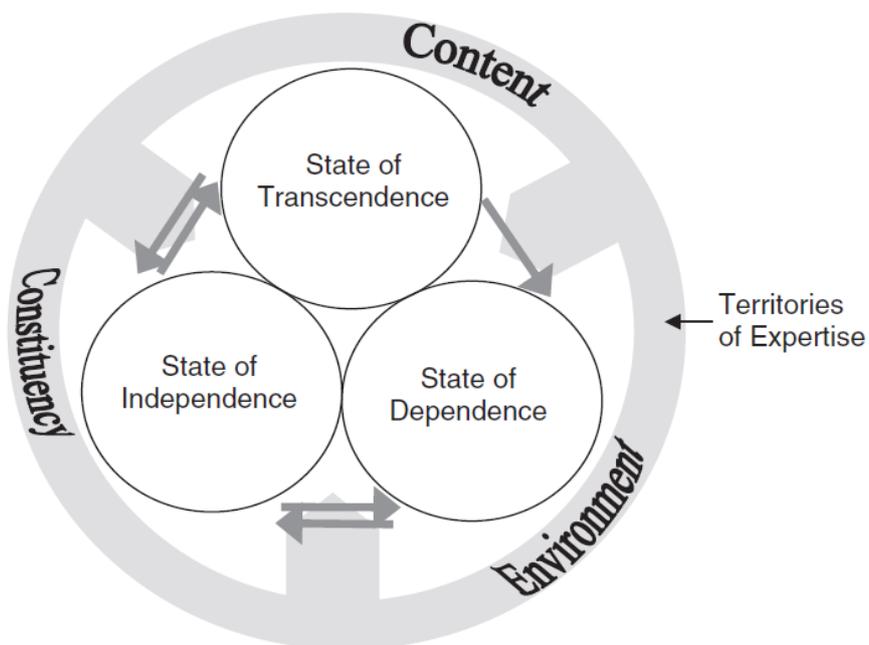


Figure 4. The Model of Expertise Redevelopment (taken from Grenier & Kehrhahn, 2008, p.9).

Three overlapping and interconnecting contextual influences (the *Territories of Expertise* – see Table 2) are recognised as potential challenges to an expert’s existing knowledge, experience, and problem solving capacities (Grenier & Kehrhahn, 2008).

Table 2. Definitions of the Territories of Expertise, and Coaching Related Examples (adapted from Grenier & Kehrhahn, 2008).

Territories of Expertise	Definitions	Coaching Related Examples
Constituency	Groups that influence/are influenced by the expert	National organisations, and associated policies, such as Sports Coach UK. Specific groups of athletes, such as a national team performance squad.
Environment	Place, culture, and socio-political conditions operated within	Whether a coach is operating in a rural or urban setting; the particular sub-culture of a certain sport; the organisational norms of a specific national governing body of sport.
Content	Knowledge for action needed to function in a domain specific role	A coach’s understanding of how to apply periodisation ¹⁰ in a certain sporting context, given the current state of (and privileging of certain forms of) knowledge.

The MER accounts for circumstances whereby shifts in the territory of expertise may force an expert from a state of relative independence back into a new state of dependence (Grenier & Kehrhahn, 2008). It may also provide a framework for investigating potential means of supporting professionals as they transition between stages of expertise (Grenier & Kehrhahn, 2008). For example, Grenier (2005) describes how an individual who regresses to a dependent state comes to be reliant on others in order to learn, or conform to new conditions. However, they may subsequently move towards independence, which is signalled by agency in seeking out resources for improvement, and retaking ownership of their own development (Grenier, 2005). Transcendence may then follow, where they still add to growth through experimentation and research, but also come to display greater use of intuition

¹⁰ The division of the training year into periods of varying volume and intensity (Bompa & Haff, 2009).

and automatised behaviour (Grenier, 2005). Rather than a progression of stages, this is considered as an interactional process, with expertise being adapted and expressed in response to altered contextual demands; that is, ongoing (re)development, commitment, and identity formation, within a constantly evolving community of practice (Grenier & Kehrhahn, 2008).

These recent developments in expertise literature offer an enhanced comprehension of what it means to be, and to remain, expert-like. They shift the emphasis from the expert as an end product, to expertise as an ongoing process, and allow for greater recognition of socio-cultural influences upon expertise, in particular reinforcing the power of agency (Hatano & Oura, 2003). Bereiter and Scardamalia (1993) affirm that only when an individual is willing to work at the edge of their current capabilities, experience greater challenge, and go beyond everyday demands, is expertise expansion promoted. Hence, actively engaging with, and exploring, opportunities to exploit further growth may be crucial in maintaining or redeveloping expert status. As Dreyfus and Dreyfus (2005, p.786) expressed: "If one is to be the kind of expert who goes on learning, one has to go on dwelling emotionally on what critical choices one has made and how they affected the outcome."¹¹

To summarise, expertise may be more complex and contingent than previously appreciated, with agency and contextual change having been underplayed as influences that may cause more novice-like or expert-like performance, implicating the need for expertise redevelopment, adaptation, and ongoing development. We will now draw parallels with how research and conceptualisations related to the complexity of expertise in sports coaching have similarly developed.

¹¹ To be clear, Dreyfus and Dreyfus (2005) also present a staged model of expertise development in this paper, and claim that once we are experts we can 'rest on our laurels', and stop obsessing about mistakes and insights. I would not adhere to either of these notions, and in particular relation to the latter an 'expert' adopting such an attitude would quickly fall away from expertise in my view. In this sense I would question, what other kind of expert is there other than one who goes on learning? And in this way we may only ever be expert-like.

2.2 Sports Coaching

2.21 Sports Coaching Research Related to Expertise

Early coaching expertise research was largely concerned with the investigation of exceptional coaches in action (e.g., Tharp & Gallimore, 1976), initially from a predominantly psychological perspective (e.g., Kimiecik & Gould, 1987), but later with a broader emphasis on characteristics and behaviours (e.g., Bloom & Salmela, 2000; Hardin, 2000). However, Côté and Gilbert (2009), and Wiman, Salmoni and Hall (2010), uphold that progress in this regard was compromised by a lack of consistency in the criteria employed to identify expert coaches, with the former claiming: “It is not clear that research on truly expert coaches exists.” (p.318).

Nonetheless, several studies attempted to combine criteria, in delineating suitable samples (e.g., Saury & Durand, 1998; Côté, Salmela, Trudel, Baria, & Russell, 1995), such as, the amount and level of coaching experience, performance standards attained by athletes coached, recognition of expertise by peers, or coaching qualification levels (Nash et al., 2012). Notwithstanding, Nash et al. (2012, p.985) concluded: “...the elements of expertise are not fully reflected within currently accepted criteria which, in turn, results in expert coaching research not necessarily identifying the appropriate individuals to study.”, and suggested that future research, and the identification of expert coaches, needs to better reflect a growing recognition of the complexity of the coaching role.

Advancement was further precluded by the absence of an agreed definition of coaching expertise that effectively encapsulated the coaching process (Côté & Gilbert, 2009). Nash and Sproule (2009) indicated it remains unclear as to what actually constitutes an expert coach, while Wiman et al. (2010, p.39) stated: “...there is no cohesive definition of what an expert coach is.” In support of this, Nash et al. (2012) discovered, in a meta-analysis of research into sports coaching and expertise, that there were considerable inconsistencies as to the definition of an expert coach, and the criteria employed to identify them.

A coach’s performance is certainly difficult to assess, and issues of effectiveness or success tend to be clouded by the opinions, definitions and values of the observer,

and varying constraints of the coaching context (Cross, 1999). Nonetheless, certain coaches consistently realise superior results over extended periods (Schempp & McCullick, 2010), seem to have reached the apex of their profession, or on the face of it attained expert status, and, therefore, have a crucial influence as role models and benchmark providers to those aspiring to greatness (McCullick et al., 1998). One way of studying such perceived experts is to explore their common characteristics.

2.22 Common Characteristics of Expert Sports Coaches

DeMarco and McCullick (1997) identified five common characteristics of expert coaches: the possession of extensive knowledge via a commitment to constant learning, a unique schematic organisation of that knowledge that facilitates its use, keen perception of events leading to superior problem solving, the employment of familiar and automatic routines, and being able to critically self-analyse their own performance. However, McCullick et al. (1998) cautioned that simply being aware of these qualities does not necessarily allow one to become an expert coach.

Nonetheless, further studies have investigated the common characteristics of expert coaches, given that an understanding of these might be thought to usefully inform expertise development, and educational schemes. However, there seems to be some confusing crossover between characteristics, behaviours, and knowledge organisation in this area (for example, DeMarco and McCullick's (1997) findings above are clearly influenced by ideas, dominant at the time of writing, about the knowledge organisation of experts, arising from cognitive psychology), but an attempt to bring together the most common, and thought-provoking, findings follows.

The most consistently prominent finding in regard to the common characteristics of expert coaches seems to be that of an ongoing commitment to learning and improvement (DeMarco & McCullick, 1997; Hardin, 2000; Wiman et al., 2010). Hence, internationally successful hockey coach, Ric Charlesworth (2001, 2004) emphasises the importance of humility for sports coaches in relation to continuing development; claiming this as a critical quality in being willing to constantly improve, and be open to new ideas, and in avoiding the self-delusion of believing you might know all the answers, which can accompany success. He states: "Humility is the seed of continued

excellence.” (Charlesworth, 2004, p.26). Similarly, Schempp and McCullick (2010) claimed that experts know that: “To stop learning is to stop getting better.” (p.223).

But, Wiman et al.’s (2010) findings suggest this may extend beyond a mere awareness of educational need, to the inclusion of motivating emotional qualities. That is, in exploring the opinions of expert coaches and elite athletes, Wiman et al. (2010) reported dedication, drive, and passion, as important emergent characteristics considered necessary to underpin coaching expertise development, and illustrated with participant quotes which implicated that an obsessive dedication to become the best was required for expertise. Schempp and McCullick (2010) correspondingly claimed that expert coaches exhibit a passion for improvement which is fuelled by constant learning, and an acute awareness that they do not know everything (they also asserted that the expert who stops learning today will become the expert supplanted tomorrow). For some individuals this might be a continuation of applied competitive instincts developed or expressed during their athletic careers.

In Hardin’s (2000) study of expert high school coaches, it was revealed that previous experience in the sport as an athlete was considered an important contributory factor towards their current coaching ability. One possible explanation is that such sports specific athletic experience might enable the coach to empathise more fully with the athletes in their charge, and empathy for athletes was another characteristic of expert coaches highlighted by Wiman et al. (2010). Furthermore, Côté and Sedgwick’s (2003) findings that expert rowing coaches were able to efficiently recognise individual differences in athletes, and establish positive personal coach-athlete relationships, is consistent with an empathetic quality.

Studies have also indicated a substantial foundation of experience as an athlete is an integral precondition for later coaching expertise (e.g., Wiman et al., 2010), although intriguingly this often appears to be accumulated from several different sports, rather than one (e.g., Salmela, 1995). As a specific exemplar, Gilbert, Côté and Mallett (2006) discovered a minimum threshold of three thousand hours of previous athletic experience, in more than three sports, for their sample of successful coaches. It was also notable that these participants considered themselves to have been only better than average athletes, at around seven out of ten (Gilbert et al., 2006); reinforcing

Lynch and Mallett's (2006) notion that one does not inevitably need to have been an outstanding athlete to develop into an expert coach. While some studies have additionally claimed that leadership experience during the athletic career may contribute to subsequent success as an expert coach (Miller, Bloom & Salmela, 1996), Gilbert et al. (2006) established, conversely, that their participants had not formerly adopted leadership roles as athletes.

Another well recognised characteristic of expert coaches is that of self-monitoring or self-evaluation (Sari & Soyer, 2010; Schempp & McCullick, 2010; Schempp, Webster, McCullick, Busch & Sannen-Mason, 2007). This is frequently manifested in literature emphasising the importance of reflective practice for the development and effectiveness of coaching practitioners (e.g., Irwin, Hanton & Kerwin, 2004). However, Wiman et al.'s (2010) research uncovered an extension of this idea to encompass open-mindedness, which was perceived as a critical characteristic in the development of coaches towards expertise by participants. The authors relate this finding to the concept of a deliberative mindset (Fujita, Gollwitzer & Oettingen, 2007), whereby the individual consciously strives to become more receptive to all sources of information and resources that might usefully inform their decisions and practice. Wiman et al. (2010) furthermore link open-mindedness to the personal quality of introspection, which helps to potentially explain the seeming willingness of experts to look within themselves, weigh strengths and weaknesses, utilise feedback, and enact change¹². They conclude that coach development may, for the most part, be considered a self-adaptive process, with open-mindedness and introspection positively enabling coach learning in several ways, and, thus, being effectively driven by the agency of the individual coach (Wiman et al., 2010)¹³.

While the investigations of exceptional individuals have established that coaching experts may share some common characteristics, they also display individual eccentricities arising from diverse developmental influences (Schempp, McCullick &

¹² In contrast, Ottati, Price, Wilson and Sumaktoyo (2015) claimed that thinking of yourself as being an expert can impede open-mindedness.

¹³ An elite running coach in Barker-Rucht, Barker and Annerstedt's (2014, p.61) case study stated: "If you're not always open to possibilities, you're not going to improve yourself." He also expressed that the learning never stops due to the dynamic unpredictable nature of sport, and that change is an unending process necessitated on each occasion that the coaching context, or athletes coached, alters.

Sannen-Mason, 2006). For example, Goldsmith and Kraiger (1997) suggest that individual experts within a subject area may differ considerably in knowledge structure, especially if they are experienced practitioners who have been able to individualise their professional practice (as is likely with expert-like coaches). Correspondingly, experienced coaches invariably develop their own coaching philosophies, which vary according to experiential influences, and the cultural setting of particular sports (Bennie & O'Connor, 2010). Saury and Durand (1998) support this diversity in declaring that expert coaches' knowledge is both the result and manifestation of accumulated situation specific personal experience.

Wiman et al. (2010) highlight that research findings on the common characteristics of expert coaches are fairly broad, and we are yet to discover how exactly they are developed, or the extent to which they promote the cultivation of coaching expertise. To remind the reader, my research will, among other things, examine the common qualities supporting the promotion of perceived expertise among expert-like coaches in their long-term developmental journeys, to potentially inform coach learning and education.

2.23 Implications for Coach Learning and Education

Salmela (1995) proposed that inconsistency within coach education, and coach learning opportunities, has resulted in varied and improvised pathways to reach expert status. Indeed, Abraham et al. (2006) describe the knowledge development of expert coaches as serendipitous (not primarily based on structured education programmes), and idiosyncratic (since individuals are likely to have developed unique knowledge storage and retrieval characteristics). It appears that, although there may be common characteristics, there is no prescription for the makeup of an expert coach (Schempp et al., 2006). That is, there is no single (or simple) way to coaching expertise.

A substantial amount of past research related to coaching expertise has utilised a cognitive approach, and emphasises particularly the role of knowledge in expert performance. For example, Rutt-Leas and Chi (1993) asserted that expert swimming coaches assessing stroke efficiency demonstrated a superior knowledge base, with a greater amount, connectedness, depth, and specificity of knowledge. Furthermore,

they highlight that the reasoning of such experts is exemplified by more findings, longer reasoning chains, and more clustered conceptual thinking (Rutt-Leas & Chi, 1993).

As a further illustration, Côté et al. (1995) described the cognitive structure of gymnastic coaches of elite level athletes in terms of mental models; characterised as flexible and adaptive structures which interrelate knowledge pertaining to coaching goals, the coaching process, athlete characteristics, coach characteristics, and situational factors. Such mental models were shown to generate operating routines for coaching interventions and athlete evaluations, thus, providing an insight into how coaches actually draw upon, and employ, their knowledge in the context of practice (Côté et al., 1995). Côté and colleagues produced a Coaching Model (CM) to schematically illustrate how expert coaches think and act in professional action (Côté et al., 1995; Côté & Salmela, 1996). However, subsequent research applying the CM in other coaching contexts (e.g., Bloom & Salmela, 2000) indicated that the model struggled to represent the extent of complexity in the coaching process, particularly in relation to interpersonal and socio-cultural elements (Cushion, Armour & Jones, 2006). Nonetheless, modelling what expert coaches know, and how they make critical decisions, may still offer promise in regard to providing educational guidance for good practice and development.

On the other hand, tacit knowledge may obscure investigating expertise and extrapolating implications for non-experts, since expert coaches are often unaware of the factors governing their practices; for instance, an expert coach may have difficulty explaining their decision making rationale, since the use of intuition may obscure part of the process (Nash & Collins, 2006). Expert coaches often seem incapable of fully explaining their actions, although stimulated recall may allow them to better express their thought processes (Nash & Collins, 2006). Nonetheless, learning from other successful coaches has been implicated as the best way of developing a knowledge base in coaching (e.g., Gould, Guinan, Greenleaf & Chung, 2002).

The ten year/ten thousand hour rule has also featured heavily in literature relating to coaching expertise; that is, expert status is thought to require ten years of deliberate practice, accompanied by critical reflection upon that experience, in order to maximise

learning (Ericsson & Charness, 1994), and this entails a considerable investment of effort, which could not realistically be achieved through typically short coach education courses alone. However, in support that this may merely represent a minimum threshold, Gould, Gianinni, Krane and Hodge (1990) found the average years of coaching experience for a large sample of US national level coaches was fifteen. Next we will consider how expertise development has been conceptualised in regards to sports coaching.

2.24 Conceptualisations of Expertise Development in Sports Coaching

Lyle (2002) argued that “Performance coaching practice will demonstrate a level of expertise that can be classified from novice to expert.” (p.132), while Trudel and Gilbert (2006) asserted that large-scale coach education programmes are founded on the supposition that coaches develop along a novice-expert continuum. The dominant belief is that novice coaches are simply neophyte experts, who will inevitably progress towards more expert-like status, as they move through education programmes, and accumulate associated experience. But, this perspective appears somewhat simplistic, and assumption rather than evidence based. Nonetheless, several coaching studies have compared and contrasted expert and novice characteristics, to potentially inform the development of practitioners (e.g., Nash & Sproule, 2011; Schempp et al., 2006).

Bell (1997), McCullick et al. (1998), and Schempp et al. (2006) all employed Berliner’s (1994) staged model of expertise development as a guiding theoretical framework to distinguish and debate the developmental stages of coaching expertise, and suggested methods through which progression through the stages might be accelerated. While Berliner’s (1994) linear model is undoubtedly a helpful conceptualisation, it is certainly no recipe for guaranteed coaching success, and features the flawed premise that novices might be able to unproblematically duplicate what experts do as a gold standard. When various other factors such as motivation, opportunity, and contextual understanding, are complicating and crucial determinants of coaching expertise (Nash & Sproule, 2011). As Nash and Collins (2006, p.472) have expressed: “...not all coaches, no matter how long they remain in sport, can become experts.” Thus, although Nash and Collins (2006) go on to recommend a lifelong

learning approach to coach development, a resultantly smooth progression through neat sequential stages is by no means inevitable.

Lyle (2002) contended the broad function of the coach is to deal with uncertainty, and maintain some degree of control, within situational dynamics. When one considers that the context within which one coaches, and the relative resulting balances of unpredictability and agency, are subject to frequent (and conceivably sometimes extreme) fluctuations, the utility of linear models of expertise development becomes questionable (Turner et al., 2012). Indeed, dealing with such complexity may be one of the hallmarks of expertise, manifested in observed behaviours such as superior situational analysis, pre-emptive and preventative action, and apparently effortless decision making (Lyle, 2002). To be fair, in his later work Berliner (2001) does emphasise the flexibility of expert practices, the need for adaptive or fluid expertise, and the significant influence of context upon development. But this is less well recognised within the coaching literature that draws upon his work.

Nash and Sproule (2009) investigated the career development of UK expert coaches, via qualitative interviews focusing on the transition experiences of nine expert coaches. The authors presented some interesting common findings pertaining to the formative experiences of their participants (see Table 3).

Table 3. Common Findings for the Career Development of UK Expert Sports Coaches (adapted from Nash & Sproule, 2009).

Common Findings
Introduced to sport by a close family member at a young age.
Positive memories of early sport participation.
Identification of at least one significant person who impacted upon their participation.
Sampling of different sports before focusing on one.
Starting to coach while still playing, but consciously concentrating more fully on coaching once athletically retired.
A personal identification with sports coaching (although most did not coach full time).
A consideration of athletes as people not just competitors.

However, Nash and Sproule (2009) admitted that what constitutes an expert coach remains unclear, and knowledge about how coaches deal with role transitions is lacking. They concluded that the interviewed coaches had been unable to provide any genuine insight into their own status as perceived experts, although they were able to broach issues concerning the relative merits of coach education courses for coach development, concluding that current provision did not facilitate these experts adequately in meeting the needs of their high-level athletes (Nash & Sproule, 2009). It is interesting to note that their common findings, reported above in relation to coach development, tend to highlight the importance of interpersonal and intrapersonal formative experiences, rather than any significance of coach education.

To summarise, expertise development in coaching has largely been conceived as a novice-expert continuum, assuming inevitable progress as a consequence of accumulated education and experience. Berliner's (1994) staged linear model of expertise development has been frequently employed to represent the coach development journey, although complicating factors may make neat sequential progression through such stages unlikely. There may be some common factors in the development of expert coaches, and the need for a lifelong learning approach, but coach education does not seem to be a particularly significant influence upon coach development.

2.25 Implications for Coach Development

Anyone embarking upon coaching usually has some preliminary experience and preconceptions, from personal experiences, or accrued observations (e.g., media coverage); hence, Cushion, Armour and Jones (2003) claimed that neophyte coaches serve an informal apprenticeship of observation (Sage, 1989; Schempp, 1989) from having been coached themselves, and witnessing the practices of more experienced coaches. That is, early influences upon coach development may initiate long before the commencement of coaching. Consequently, the beginning of any conceived developmental continuum (see Figure 5) surely requires an arrow pointing away towards more novice-like status, indicating effectively that there is no absolute novice coach starting point.

Similarly, expertise is not a definitive continuum endpoint either. If we know one thing about experts it is that they are never satisfied, constant learners, always striving to do differently or become better (Schempp & McCullick, 2010). So, expertise may need to be recognised as dynamic and adaptive, and conceptualised as an ongoing journey, rather than a realised destination (Turner et al., 2012). Experts are constantly pushing the developmental envelope, though they are by definition already more highly developed than most. Full expertise, in this view, is at best provisional, if not unattainable (Nunn, 2008), such that coaches might be described as expert-like at best (see Figure 5).



Figure 5. A More Realistic Novice-Expert Continuum for Sports Coaching?

As an illustration, John Buchanan, the most successful international cricket coach in history, prefers to express that he has some expertise to offer in the coaching role, rather than that he is actually an expert – given that he believes to be considered an expert implies that one has (unattainable or unsustainable) complete knowledge in the area (Buchanan, 2007). The coach claiming to be an expert is sooner or later going to be found wanting. Thus, Buchanan advises: “Do not be the expert; be credible through the best use of your expertise.” (Buchanan, 2007, p.160).

Coaching has come to be regarded as a practical and intellectual endeavour, with the requirement for balanced development in order to be effective (Cushion et al., 2010). Hence, for instance, ten years of study, without commensurate practical coaching experience, or vice versa, will likely result in an unbalanced practitioner who will not be perceived, or accepted as, an expert in such an applied field. Learning about coaching theory through coach education, then, can potentially inform practice, but practical knowledge is only constructed through attempting its application within context, and developing further understanding through this process. Practice is, therefore, fundamental to the development of skilled performance within the coaching

domain. A failure to engage in intellectual study, on the other hand, may constrain a coach's development towards expertise, as they would likely be less aware of theory that could potentially inform practice, or help them to make sense of practical experiences.

While similarities between coaching situations, and relatively stable components of the coaching process, would likely allow proactive coach learners to move towards expert status, differences between each coaching context, and the underlying state of flux of the coaching process, dictates that practitioners need to constantly update and develop their practical coaching knowledge (Turner et al., 2012). Thus, it is possible that a switch from one coaching context to another may in certain instances be accompanied by a negative impact upon the level of expertise (Turner et al., 2012). Hence, Werthner and Trudel (2006) claimed that the traditional novice-expert continuum model in regard to coach education is being supplanted by a focus upon the importance of the specific coaching context. For example, various coaching typologies have been proposed, such as Lyle's (2002) participation, development, and performance coaching. It is feasible that elements of a performance coach's practical knowledge (such as that of a specialised Olympic level coach) would not neatly transfer to coaching within participation environments (such as grass roots programmes to encourage sporting engagement), and vice versa. In both instances, it is likely that some elements of the coach's knowledge would be redundant, and while certain understandings and experiences could facilitate this transfer, others might hinder effective coaching practice within the new environment.

Côté and Gilbert (2009) made a valuable attempt to provide a definition of coaching effectiveness and expertise, with a particular strength being the recognition of the interactional nature of three proposed components – coaches' knowledge, athletes' outcomes and coaching contexts. Moreover, complexity was acknowledged in that each component was broken down into integrated sub elements, such as coaches' intrapersonal knowledge (understanding of oneself). However, whether expertise and effectiveness are synonymous may be questionable, and the definition: "...coaching expertise refers to specific knowledge in particular contexts." (p.316) seems rather narrow and knowledge heavy. Nevertheless, an appreciation of the importance of

context seems a welcome development in terms of offering a more nuanced perspective on expertise.

But, when Côté and Gilbert (2009) state: "...effective coaches are those who demonstrate the ability to apply and align their coaching expertise to particular athletes and situations in order to maximise athlete learning." (p.316), the underlying implication is that some expert coaches may *not* be effective if they *do not* apply and align their expertise to specific contexts and athletes (such as football coach Brian Clough's infamous 44 days at Leeds United (Rostron, 2011), or rugby coach Sir Clive Woodward's disastrous 2005 British and Irish Lions tour (Bloyce, Liston, Platts & Smith, 2010)¹⁴). That is, one might 'fall out' of expertise. Côté and Gilbert (2009) also postulate a typology of four generic coaching contexts, derived from athlete development literature, each of which place somewhat different demands upon the coach; nonetheless, provisionality was acknowledged in that: "...ultimately, every relationship between a coach and athlete(s) constitutes a specific coaching context because of the different dynamics that exist." (p.319).

Schempp and McCullick (2010), in reviewing coaches' expertise, claimed that there are three underpinning elements - experience, knowledge, and skill. Although the interdependence of these was alluded to in regard to the development of expertise, the nature of this was not explicitly detailed. Furthermore, skill might more appropriately be labelled problem solving, in that the former always seem to be employed in practical engagement with the latter in coaching. For example, McCullick, Schempp and Cumings (1999) indicated that expert coaches considered themselves to be in the repair business – identifying and fixing faults. Schempp and McCullick (2010) concluded: "The path towards coaching expertise is one that anyone can pursue... any coach can become a more-expert coach." (p.230). But what is unacknowledged is that any coach may also become less-expert, and that to extend the analogy there is not one, but a multitude of possible paths, some more circuitous than others, such that dead ends and doubling back may feature, as well as general

¹⁴ Both coaches were highly successful immediately prior to these notable failures, in similar sporting contexts.

progress towards a never arrived at end point. Furthermore, through agency, coaches might effectively partly carve out their own paths.

As we have seen, recent work related to expertise (e.g., Grenier & Kehrhahn, 2008; Nunn, 2008; Martinovic, 2009) has tended to emphasise complexity, and its dynamic, non-linear, contextual, interconnected nature. This has resonance with recent conceptions of sports coaching which has come to be recognised as an extremely demanding task, featuring complexity, ambiguity, and uncertainty, enacted within a dynamic environment, and embedded within a constantly fluctuating and essentially social process (Bowes & Jones, 2006; Jones & Wallace, 2005; Saury & Durand, 1998). Indeed, some authors have even made a link between coaching and chaos theory (e.g., Mayer-Kress, 2001; Mack, Huddleston. Dutler & Mintah, 2000). Thus, there are clear parallels between general expertise literature and specific sports coaching publications, with a common message that it is unwise to try to oversimplify what can only be appropriately comprehended by appreciating its full complexity. If coaches do not recognise the complexity inherent in sports coaching, as they work at what Bowes and Jones (2006) describe as the edge of chaos, then they are setting themselves up for inevitable disappointment (Jones & Wallace, 2005). The same may be true for educators attempting to facilitate the development of coaching expertise.

Those coaches aspiring to develop and maintain expert status should continually seek knowledge from a broad diversity of sources, interact with as many relevant others as possible, and embrace growth provoking opportunities (Schempp, 2000). Thus, coach education might seek to be more inclusive and imaginative in relation to potential knowledge sources for coaches, should perhaps build upon opportunities to promote and utilise social interactions within authentic communities of practice, and could actively encourage engagement with new coaching challenges (Turner, 2008).

Literature pertaining to expertise could usefully enlighten our comprehension of the dynamics of coach learning and development. For instance, there are indications that coach education might accelerate development towards expert status by attempting to encourage practitioners to reflectively squeeze more learning out of experiences gained (Werthner & Trudel, 2006), to encourage the development of knowledge structures and facilitate the application of knowledge to practice (Abraham & Collins,

1998), and promote engagement in socially grounded problem-based learning (Jones & Turner, 2006). Furthermore, a reconceptualisation of sports coaching expertise, and its development, would likely lead to a greater recognition of the need to develop creativity rather than mere competence in coaches, and to move away from the narrow indoctrination of homogenised coach training, to a broad individualised and situated coach education (Cushion & Nelson, 2013).

Snapshot descriptions of the stage characteristics of expertise are of limited utility in their application to the complex and dynamic nature of professional practice in activities such as coaching (Turner et al., 2012). Nonetheless, organisations concerned with the education of sports coaches often portray the attainment of coaching qualifications, or levels of ability, simplistically and unproblematically as a ladder or set of tiered steps (see Figure 6), mirroring stage models of expertise development (e.g., Berliner, 1994; Dreyfus & Dreyfus, 1986). Redevelopment is given scant attention, and regression is not really conceived of.

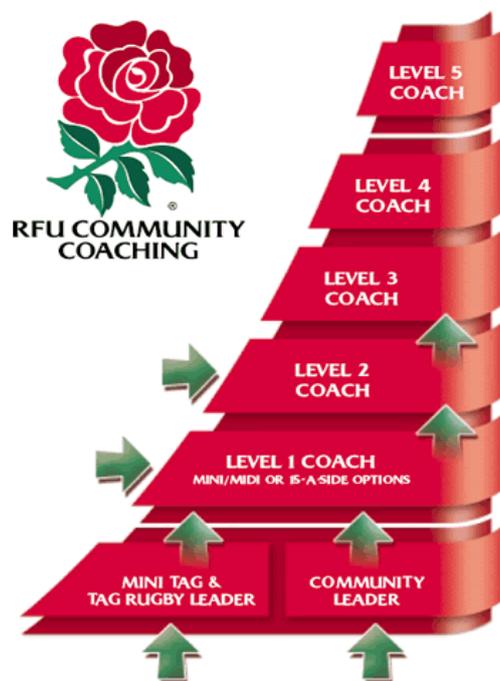


Figure 6. Rugby Football Union Coaching Award Structure (taken from Nottingham, Lincolnshire and Derbyshire Rugby Football Union Website, 2011).

We need more research that explores how expertise periodically develops and responds to changes in professional contexts, to assess the legitimacy of recent conceptions of expertise, such as the MER model (Grenier & Kerhhan, 2008), and to supply evidence as to the potential utility of these notions. Grenier and Kerhahn (2008) indicated that we should investigate experts in fields where changes are frequent, and coaching would appear to be a well-suited setting in which to undertake such study. For example, Nash and Sproule (2009) indicated that knowledge of how coaches deal with role transition experiences during their careers is lacking. Exploring critical incidents in the developmental journeys of expert-like coaches could be productive here. Furthermore, an enhanced appreciation of the parameters, components, development and maintenance of expertise within this domain, may provide greater insight into the nature of coaching itself.

Obtaining a better understanding of expertise is of importance for those responsible for nurturing the growth and development of coaches, and practitioners aspiring to maintain or transfer their existing coaching expertise. For example, if, as Bereiter and Scardamalia (1993) assert, expertise is increased only when individuals embrace new challenges at the edge of their existing capabilities, then educators might productively encourage practitioners to positively value opportunities to engage in novel practical contexts, grapple with interesting ambiguities, and reconsider professional implications; thus, generally exploiting chances to promote personal growth, and effectively sculpting their own developmental journeys (Turner, 2008). Taking on a variety of new challenges may also be of benefit; accordingly, Schempp (2003) claimed that a greater diversity of coaching experiences offers extra developmental advantage, in that skills are adapted and strengthened in response to shifting environmental demands, and the knowledge base of the practitioner is deepened. Hence, coach educators might attempt to cultivate and support proactive lovers of opportunity and uncertainty, who may be more likely to develop robust qualities, as a result of frequent boundary crossing (Saljö, 2003) among coaching settings.

Some theoretical conceptualisations will now be considered that might be useful in illuminating how coaches might go about learning and adapting in response to their experiences within the developmental journey towards expertise.

2.3 Learning

2.31 Learning as Becoming

Hagar and Hodkinson (2009) assert that learning is a contested concept. One major divide is between cognitive and situated theories of learning (Hodkinson, Biesta & James, 2008), which Sfard (1998) presented as the contrasting metaphors of learning as acquisition (emphasising an individual's accumulation of knowledge), and learning as participation (emphasising the socially located nature of learning). However, the alternative metaphor of learning as becoming (Colley, James, Tedder & Diment, 2003; Hagar, 2005) may offer a more inclusive view, encompassing both individually based and socially situated learning (Heslop, 2011). Specifically, Hodkinson and MacLeod (2010) describe it as a fusion between social participation and Deweyan embodied construction perspectives, which may help to provide a more holistic appreciation of learning as an integrated ongoing process (Hagar & Hodkinson, 2009).

Long ago Dewey (1938) claimed that learning is embodied; that is, involving the interrelationship of the cognitive, physical, emotional, and practical, in continuous interaction with the environment. This may be particularly useful for considering work related learning, which features integrated and committed practical application, and intelligent judgement based action (Hodkinson et al., 2008), within a dynamic setting. The combination of embodied learning with a participation metaphor, ameliorates criticism of the latter as insufficiently accounting for how the individual's life history¹⁵, dispositions, agency, and identity formation influence learning (Billett, 2001; Guile & Young, 1999). Simultaneously, it addresses the decontextualisation of learning associated with the acquisition metaphor (Hodkinson et al., 2008), and related assumptions about unproblematic transfer of learning (Hagar & Hodkinson, 2009), which sits uncomfortably with work related learning, which tends to be firmly grounded in specific cultures.

¹⁵ Hodkinson and MacLeod (2010) and Hutchinson and Rea (2011) both mention Dominicé's (2000) conceptualisation of *formation* (a blending of formal and experiential learning that shapes an adult life history) as a further example of learning as construction. Interestingly, Dominicé (2000) used the resulting educational biographies to promote the self-learning of participants.

The potential benefits of adopting the learning as becoming metaphor include the recognition of the importance of both individual and contextual change within the learning process. This may be particularly pertinent in situations where persons' work situations significantly alter, and in support of the current study Hagar and Hodkinson (2009) indicate that we currently know little about how to support individuals in making such transitions (Beach, 2003), or boundary crossing (Saljö, 2003). Here learning as becoming links the learner to the context in an evolving transactional relationship, which may alter either or both; a shifting relational web, inclusive of the learner and context, in a process of ongoing change (Hagar & Hodkinson, 2009). Whereas, Hagar (2005) has criticised acquisition and participation metaphors as being overly static, Hutchinson and Rea (2011) claim that learning as becoming incorporates notions of transformation and reconstruction, implicating possibilities for profound change. For the mechanism of such change we return to a Deweyan perspective:

“Dewey (1916) ...saw learning as a process. For Dewey, the overriding principle is that the good life for humans is one in which they live in harmony with their environment. But because the environment is in a state of continuous flux, so humans need to grow and readjust constantly to it so as to remain in harmony with it. Thus, for Dewey, education must instil the lifelong capacity to grow and to readjust constantly to the environment.” (Hagar, 2005)¹⁶.

Heslop's (2011) work about the training and development of police recruits supports the notion of learning as a process of becoming in the situated workplace. The learning of recruits was revealed as being both individual and social participatory, as they not only changed in the process of becoming police officers, but that transformation also affected their learning (e.g., in re-evaluating past learning and experiences). Worth noting, from a holistic perspective, is that such learners will also inevitably bring a pre-existing sense of self, and accumulated dispositions as a result of previous 'becomings'¹⁷, as well as be influenced by ongoing contemporary experiences from

¹⁶ Note that an implication here is that if a person does not grow and adjust in response to fluctuations then they would be likely to experience disharmony.

¹⁷ Hodkinson et al. (2008, p.28) state: "...we need to understand learning at any one time as part of a lengthy on-going process, where the past life history of the individual and the past history of the situation strongly influence that current learning."

their wider lives. Hence, Hagar and Hodkinson (2009, p.633) state: “When a learner constructs or reconstructs knowledge or skills, they are also reconstructing themselves.” Such becoming could be the result of intentional agency, or occur below the level of awareness, but learning through becoming, and becoming through learning, are thought to be inseparable, unavoidable, and unceasing in lifelong learning (Hagar & Hodkinson, 2009). Thus, for example, Bowman, Hodkinson and Colley (2005) reported how career shifts, and broader life experiences, contributed to the non-linear career development, personal transformation, and dispositional change of ex-Masters students.

In summary, learning as becoming offers a useful view of learning as a transitional process, whereby individuals encounter new settings, and altered ways of being, which are themselves interrelated. Learning might be effectively triggered by an obvious stimulus (such as a critical incident or specific transition), or be gradually engendered by less immediately apparent changes over time (general trajectories) (Hodkinson et al., 2008). Whichever, learning as becoming offers a holistic perspective, wherein learning is seen as an organic and dynamic relational process, inclusive of interpenetrating contextual, cultural, social, and personal factors (Hagar, 2005). Such an approach sees the learner as emergent (Rosenau, 1992), rejects a stable autonomous learning self, and recognises: “...our multiple selves that are constantly in flux, that hold contingent and conflicting understandings.” (Kilgore, 2004, p.47). As such it would seem to potentially account well for issues of change, uncertainty, and (re)construction central to this study.

While this intimates that learning is contingent on a shifting Gordian knot of entangled personal interpretations, social interrelationships, and contextual influences, Kilgore (2004) claims that powerful knowledge for transformative action can still emerge, and this appears to make intuitive sense in regard to the real world achievements of experts in various fields, who appear to typically operate effectively despite circumstances of complexity. Furthermore, the interaction with the context within which learning is situated, is recognised as being potentially either facilitative or constraining (Cushion, 2011), thus, it might be possible for educators (or learners) to manipulate or enhance contexts for the purposes of promoting learning.

This leads Hagar and Hodkinson (2009) to pose a question pertinent to this study. How might learning through transition, or boundary crossing, be better supported by education? Interestingly, in an exploration of the interrelationships between the changing person, and their changing circumstances, in the transition to retirement, Hodkinson (2010) concluded that no universal approach to supporting related learning would be likely to help all, and indicated the confounding nature of unintentional and unpredictable informal learning. Hagar (2005) also cautioned against all embracing theoretical explanations of workplace learning (particularly those based on privileging single factors). In such circumstances of complexity Hodkinson (2010, p.102) recommended localised concentration of efforts on: "...increasing the likelihood of beneficial learning in a particular situation, accepting that they may not always be successful." This implicates that supporting the ongoing learning as becoming of practitioners may be no easy matter, and might require bespoke interventions.

Interestingly, several recent sports coaching related sources have used the term becoming in their titles (see Table 4). However, none draw specifically upon the conceptions of learning as becoming detailed above, nor utilise the particular learning literature reviewed thus far in this section. Rather, they employ becoming as a generalised term in relation to the developmental pathway of coaches. Furthermore, only Trudel and Gilbert's (2013) work focusses directly upon expert coaches, as opposed to highly experienced or high-performance coaches, although Mallett (2010) discusses expertise as well. Nonetheless, one gets the sense of the pre-eminence of experience in the developmental journey, how the coach may be transformed by critical incidents, how coach learning is socially and contextually situated, how coach biographies are likely to be unique, and how further coach development may require both agency and tailored facilitation.

Table 4. Examples of Recent Sports Coaching Sources Featuring 'Becoming' in the Title.

Source	Author's Notes
Trudel, P., & Gilbert, W.D. (2013). The role of deliberate practice in becoming an expert coach: Part 3 – Creating optimal settings.	One of a series of articles promoting the significance of deliberate practice in becoming an expert coach. Emphasises the importance of creating optimal coach development settings in which coaches are themselves coached to formally and regularly engage with critical reflective practice related to their work. Also proposes the integration of learning science, and

	the cultivation of coach learning communities, in coach development. But cautions that progress towards expertise will ultimately depend upon the personal investment of the coach in reflection to maximise potential learning. The article draws heavily upon the ten thousand hour rule, and a linear staged model of coach expertise.
Callary, B., Werthner, P., & Trudel, P. (2012). How meaningful episodic experiences influence the process of becoming an experienced coach.	Adopts a view of learning as becoming. Persons become transformed through engagement in social situations that are integrated into the biography. Episodic experiences considered meaningful can manifest in significant change, and impact upon subsequent learning. Employed non-fictional vignettes to illustrate how five Canadian female coaches learned through such experiences. Since biographies are unique, coaches are likely to perceive a variety of planned and unplanned experiences as important and influential for their developmental pathways. Classifying the learning situations of coaches is overly simplistic, and does not encompass the idiosyncrasies of coach learning in different contexts. Coaches' lifelong learning situations are likely to be dissimilar, especially when they are autonomous and self-directed as was the case with these participants.
Mallett, C. (2010). Becoming a high-performance coach: Pathways and communities.	Underscored the complexity of the high-performance coaching role. In becoming such a coach the value of accumulated experience and immersion in coaching practice was highlighted, including occupational socialisation and the development of commitment. Working in a dynamic and transforming environment makes preparation problematic. But reflection upon coaching, and engagement with influential others via a web of dynamic social networks aids in the process of situated learning. Although extensive playing experience was emphasised, there is considerable variation in athletic and coaching pathways. Recommended further research on how critical incidents contribute to developing expertise, to inform coach development. Implicated the agency of the coach in engaging with learning opportunities, and integrating developmental experiences to shape knowledge, practices, and the career path.
Lynch, M., & Mallett, C. (2006). Becoming a successful high performance track and field coach.	Investigated key elements in becoming a successful high-performance athletics coach. Participants had coached many elite international athletes over an extended period. All had previously been athletes for around eleven years/four thousand hours of training, but most only described themselves as having been reasonably competent. Coaches also had experience playing other sports.

Of late, 3 postgraduate theses (all from University of Ottawa) have explored the learning experiences and developmental pathways of coaches, each recurrently

featuring the term becoming within their content (Capstick, 2013; Crickard, 2013; Duarte, 2013). Capstick (2013) investigated the development of recreational youth soccer coaches, and how they learned to coach; their biographies were found to differ significantly, and the contexts within which they worked also displayed great variation, with a spectrum of challenges encountered. Consistent with previous research (e.g., Nelson et al., 2006) the coaches reported learning from a broad variety of sources, but predominantly from informal opportunities.

Crickard (2013) explored the career pathways, and formative learning experiences of high-performance ice hockey coaches. Although some similarities in learning experiences were revealed (i.e., coach interactions, books and videotapes, coaching clinics and academic education, experiences from playing and coaching), the eleven coach pathways were described as idiosyncratic, only partially similar, and did not fully conform to any existing developmental model. That is, each coach exhibited a distinctive atypical pathway.

Duarte (2013) examined how one coach of disability sport learned to coach via her experiences. Collaborative environments and social interactions were revealed as key factors relating to her becoming as a coach, in particular the coach actively chose to engage with various supportive others (Duarte, 2013). Over time the coach progressed her career as a result of challenges and learning situations encountered (Duarte, 2013). Although featuring a single case study, the following thought-provoking recommendations for coach developers were extrapolated: that they should strive to comprehend individual coach biographies, coaches' current level of development, and the particular coaching challenges that they are likely to face in their specific sporting context, and the capabilities they require in order to deal with them (Duarte, 2013). And, in direct connection with the focus of the current study, that when experts make the transition to new contexts they might require a period of supported adjustment, while they grow accustomed to the new situation, and get to grips with altered circumstances; moreover, it was suggested that a peer could be allocated to the coach to help familiarise them with the unaccustomed subculture (Duarte, 2013).

Capstick (2013) and Duarte (2013), as well as several other recent sources (e.g., Callary et al., 2012; Duarte & Culver, 2014; McMaster, Culver & Werthner, 2012),

utilised Jarvis' lifelong learning theory (2006, 2007, 2008, 2009, 2010) as a guiding conceptual framework for the consideration of coach development. This seems useful, in that it offers a long-term view of learning over the lifetime, which encompasses the whole (endlessly transformed) person (Jarvis, 2009). Jarvis (2009) asserts that we have the potential to learn from every experience, and that the personal biography of learners is the product of those combined experiences perceived to be meaningful.

This implies that all learners are unique, given that their biographies will inevitably be founded upon a one-off cumulative diversity of influential formative experiences, for instance, from significant others during primary socialisation (when a young child), and from an array of broader interactions in secondary socialisation (such as vocational situations) (Jarvis, 2009). Furthermore, previous learning experiences will affect the extent to which new learning opportunities are recognised, valued, or engaged with (Jarvis, 2006). Thus, different coaches might regard the same coaching situation very differently, since personal biographies will engender dissimilar interpretations, and divergent attributions of meaning. In this way, Jarvis (2006) would consider that our experiences, and our learning from them, are personally and socially constructed, as well as constructing. That is, we will learn from experiences in different ways based upon our individual biographies and socialisation, which in turn affects the possibilities for our ongoing growth and development.

Essentially, as we are holistically transformed (in the way we think, feel, act, etc.), during our lifelong learning journey; we are forever becoming the product of our evolving learning biography (Jarvis, 2009). In this fashion, Jarvis (2006) claims that to learn is to be changed, and in this sense we return to the notion of learning as becoming. Persons will form identities founded on past experiences, and derive altered identities from subsequent ones (Jarvis, 2006). Consequently, Jarvis asserts that each individual will inevitably carve a distinct developmental pathway of becoming (Jarvis, 2009). This seems to resonate well with recent findings on coach learning detailed above, and appears to offer a broad and realistic standpoint (Capstick, 2013), consistent with Watts and Cushion (2016) who reported shifting identities, as coaches adjusted their practice to the changing demands of coaching, in perceived progress towards becoming a good coach.

From this perspective who we are as a coach, how we operate, and why we act in that way, are a direct result of our becoming. Within this complex process, extended experiences accumulated over the life course, and episodic experiences deemed of significance, will interconnect in determining an individual's knowledge and understanding (Jarvis, 2006). As part of becoming, Jarvis referred to the importance of the environment in which we live, learning from our peers in social context, the stage of development of our personal biography, and the characteristics of the various issues we face (Jarvis, 2009).

Jarvis (2009) regards disjuncture as critical for learning, and defined it as the sense of discomfort a person has when they encounter a circumstance where their personal biography does not befit them to deal with matters comfortably. That is, when prior experience does not match well current demands. Jarvis (2009) suggested that altered situations, or conditions of change (such as transitions, or unfamiliar issues), are replete with potential for feelings of disjuncture, which may provide a stimulus for further learning, in order for the individual to attempt to re-establish harmony (although he also indicates it is possible some might choose to reject opportunities to learn, such that we do not necessarily learn from all episodic experiences, or may not learn appropriately).

Given the multidisciplinary and intersubjective complexities of coaching, sports coaches are highly likely to experience disjuncture during their developmental journeys, and one might speculate that this could represent a potent motivating factor in regard to an unquenchable thirst for ongoing learning observed as a characteristic of expert coaches (Wiman et al., 2010). Hence, Duarte (2013) indicated that when a coach comes up against an issue of disjuncture they must reflect upon whether, and how, to engage in associated learning. The coach featured in Duarte's (2013) work seemed to have encountered numerous examples of disjuncture during her coaching life, presenting an abundance of learning opportunities. This reinforces that a variety of challenges and issues encountered could be a catalyst for a richer becoming. Moreover, the coach studied may have sometimes actively sought disjuncture experiences, by, for instance, choosing to undertake a Masters in coaching (Duarte, 2013).

Along these lines it might be that coaches could reflectively choose to self-identify with certain experiences, and deliberately cultivate new identities, rather than merely accepting what comes along, conforming unquestioningly to accepted wisdom, or only engaging in learning to regain harmony. For instance, coaches could come to regard role transitions or changes in context as developmental opportunities (Jarvis, 2009), since they will be compelled to come to terms with novel demands and different perspectives, which will in turn alter their biographies. That is, while experience alone is not necessarily sufficient for expertise, a greater diversity of experience is likely to present more issues to be dealt with in order to promote growth (such as having to accumulate new knowledge, or develop new skills). One could claim that in fully being with our possible experiences we are becoming ourselves.

However, the potential learning autonomy of coaches needs to be balanced against issues of power. Jarvis (2006) cautions that while we largely generate our own biographies, our capacity to learn and act as we see fit is constrained by our socio-cultural interactions with others. We may not have access to the education or experiences we desire, and our ability to learn may be facilitated or inhibited by circumstances (Jarvis, 2007), such as the pace of change. Here we are reminded that becoming is a complex contingent matter. Hence, Jarvis (2006) indicates that it is impossible to fully comprehend multifaceted lifelong learning in its entirety. As an illustration, Werthner and Trudel (2009) confirmed that coaches promoted their development via experiences from both within and external to the sporting context. Furthermore, we may not always be consciously aware of significant learning from life experiences until much later (Jarvis, 2006), if at all.

Nonetheless, the metaphor of learning as becoming encourages us to regard coaches as unique learners, and respect the significance of their personal biographies (Capstick, 2013). But as the following section highlights, the immersed engagement of coaches in the world of practice may extend beyond learning as becoming to a more intertwined, spontaneous, and creatively adaptive learning as well.

2.32 Learning as Dwelling

Postmodernism is potentially useful in interrogating dominant beliefs and assumptions, and deconstructing grand universal truths, down to small, localised, and

differentiated interpretations (Kilgore, 2004). From a postmodernist perspective there is no objective truth, such that knowledge is essentially context dependent and temporary (Plumb, 2008). Hence, Kilgore (2004) claims that for adult education to be effective it must be overtly situated (in a context that is recognised as inevitably unfolding) in order to elicit knowledge relevant in empowering and socially transforming individuals, and must feature questioning or refutation of conventional wisdom, since the domain and the learner are always considered to be changing.

However, Plumb (2008) criticises postmodernist thought as being too relativist, excessively critical, and over privileging the importance of social forces in the construction of identity and meaning. He offers learning as dwelling as an expanded and balanced conception of adult learning, which concurs with Archer's (2000) views on human development as occurring through an ongoing practical engagement with reality – a process of entwining, favouring neither agency (humans as creators of society) nor structure (humans as products of the social context).

Drawing on Heidegger's (1971) observation that 'to dwell' once referred to how one lives, or one's being, in the world, Ingold (2000) asserted what people produce, such as buildings, is only possible because we already dwell in the world, through practical engagement with our surroundings. While a building viewpoint would have us focus on end products, and individuals' mental representations prior to realisation, the dwelling perspective, emphasises the ongoing powerful processes of immersed engagement, development, and emergence (Plumb, 2008). Thus, learning is conceived as neither merely conforming to a cognitive acquisition metaphor, nor being limited to a building perspective¹⁸ (Plumb, 2008). Ingold (2000) utilises a basket weaving analogy, where the weaver's skill and knowledge alone do not completely establish what the exact shape of the ultimate resulting product will be; instead, in a complicated, unfolding situation, they determine the broad boundaries of the process, but do not entirely predetermine the outcome.

¹⁸ The building perspective overemphasises individual cognitive capabilities, privileging them as above and separate from the natural and social worlds; essentially human beings are elevated to a position of rational supremacy above nature; emotion is relegated to a factor which must be prevailed over in order for progress to be unhindered (Plumb, 2008).

Thus, the dwelling perspective proffers that potent learning emerges principally through practical action as we entwine ourselves with the surrounding world; in engaging with unfolding reality, and involving ourselves in experimental interactions with materials in our environment, we learn to appreciate the nuances and affordances of the world (Ingold, 2000), and how to attune our skills and feelings to forces within it (Plumb, 2008). As we knit ourselves into the fabric of our environments, we come to notice when our ideas, and actions go against prevailing patterns, or do not fit well with how things are, demanding of us fine tuning and alteration of our practices (Plumb, 2008). While individuals cannot attain fixed or perfect knowledge of reality (and as Plumb (2010) indicates this is especially so for those forever in a process of becoming), the dwelling standpoint refutes that we have no way of discriminating when our engagement with the world is out of kilter (Plumb, 2008). We may therefore not only distinguish our shortcomings, but additionally draw upon the usefulness of such awareness in stimulating further adaptive growth (Archer, 2000). That is, we can engage in, and learn from (mistakes made in) experimental practices fitting, there or thereabouts, the properties of the dynamic situations that we encounter.

Taber, Plumb and Jolemore (2008) explored the learning of firefighters and paramedics in the context of emergency response, and found that both acquisition and participation metaphors were inadequate to explain how these practitioners learned from their practical engagement with chaotic, unpredictable, and emotionally laden crisis situations, in dwelling in the vocational world. For example, it was proposed that emergencies often thrust individuals beyond the boundaries of standardised practices, or communities of practice, where a generative, adaptive and creative autonomous learning response is deployed based on embodied dispositions, in order to navigate grey areas rapidly without a map (Taber et al., 2008). Effectively these persons were compelled to rely on their own resources, and learn on the hoof, to maintain their bearings in engaging practically with an uncertain evolving world.

Professing the pre-eminence of practice does not negate that we are social beings immersed in social discourse (Plumb, 2008). Nonetheless, the manner of our everyday sociocultural encounters, such as those experienced in communities of practice (Lave & Wenger, 1991), is regarded as (at least partly) a creative and agentic one (Plumb, 2008). Given that there may be multiple causations, and facilitating circumstances, for

any occurrence, individuals are neither entirely constrained nor absolutely unrestrained to mould their situations (Sayer, 2005). Instead, the experience of dwellers is a consequence of their active immersion in practices that bring together, and sculpt, both themselves and the environment they engage with (Plumb, 2010).

Hence, both we and the world not only continually become (Plumb, 2008), but each also has the potential to transform the other. We are not only sufficiently malleable to be able to actively adjust and grow in response to the exigencies of our interactions with a complex and fluctuating environment, we may also have the capacity to transcend and alter that environment from within (Plumb, 2008). Learning and dwelling are hence considered inextricable, if we are to involve ourselves in interactive, inventive, and unfolding relationships with the environment: "It is through learning that we dwell; it is through dwelling that we learn." (Plumb, 2008, p.74).

As we live and develop in interweaving our practices with the materials of the social, cultural and natural worlds, the recognition of other fellow dwellers, within the landscape we shape (Ingold, 2000), is promoted (Tomasello, 1999); which enables the adoption of other world views (Plumb, 2008), and places us in a position to interrelate with them in intentional and cooperative projects of engagement in the environment (Tomasello, 2014). Change, legacy and memory are created, which affect subsequent engagements (Kim, 2010); furthermore, as we become enculturated in intersubjective contexts, our capacity for emotional investment in the culture intensifies (Plumb, 2008). Thus, newcomers to a community of practice come to progressively entwine and attune their practices into the fluidly evolving social reality of the group, to develop a sense of convergent 'belonging' (Wenger, 1998).

From this perspective it may not simply be a matter of recognising learning as being social (Lave & Wenger, 1991) rather than appreciating that social structures such as communities of practice emerge *because* we are dwellers capable of weaving ourselves into interrelational milieus (Plumb, 2008). They materialise, when, as part of our learning, we attach and interlace ourselves with the social and material processes that surround us, through extensive practical engagement (Plumb, 2008). The idea of learning as dwelling enriches our appreciation of the wider possible learning capacities that we have at our disposal as embodied beings, beyond mere knowledge acquisition,

or social interaction (Plumb, 2008). Learning is defined as an activity in itself, rather than the result of something else, and is viewed as unavoidable (Saljö, 2003) and inevitable (to an altering extent) throughout life (Salter, 2011).

Thus, learning as dwelling presents a way of conceiving of the association between humans and their world, as a relational process extending across self, practice, and shared cultural settings (Plumb, 2008). Our own emerging learning power, depends less on the extent we are set apart as autonomous agents, but is a function of the depth and creativity of our entwinement in the varied materials of reality, and our capacities for intersubjective action (Plumb, 2008). Rather than just transformation in our cognition, a transformed sense of self is implicated, in that dwelling in a natural world can give rise to evolving capabilities, via an unfolding creative process (Kim, 2010), as we interlace our embodied practices with others to generate potent social structures (Plumb, 2008) (such as, for instance, the creation of a cohesive team of sports coaches, or the establishment of an effective coaching programme).

However, it may be speculated that the complexity of this process, and its contingency, is also likely to lead to occasional non-emergence or non-transformation, due to turbulence in the many influencing factors. That is, it is possible that learners may not become, may not dwell comfortably within domains, or may need to become something else or learn to dwell in a different environment, as a consequence of fluctuating circumstances. For instance, Halse (2010, p.25), in describing how teacher educators frequently have an oversimplified conception of the developmental journey from course to classroom, claimed that: “The process of becoming is never a calm, linear course. It is a knotty path full of twists and turns”. In presenting one particular life history of an Australian teacher, Halse (2010) portrayed a process of (un)becoming, whereby the practitioner gradually came to an acceptance of the difference between what she wanted to achieve, and what the context of professional practice made possible. Likewise, Butterworth and Turner (2014) described a frustrating journey of the unbecoming of a sports coach who unintentionally became side-tracked into an administrative coach education role. It is proposed that some of the thinking tools from the work of Pierre Bourdieu may be facilitative in exploring further the potential causes and effects of such oscillating circumstances as might

affect expert-like coaches, and their development, and it is to his theories that we now turn.

2.4 Bourdieu's Theory of Practice – A Feel for the Game

Bourdieu sought to connect theory and practice in apprehending a 'theory of practice', and developed a set of thinking tools (unique conceptual terminologies constituting a Bourdieusian language) with which to discuss, analyse and interpret findings (Grenfell, 2008a). These concepts are interrelated and interpenetrative, encouraging us to think in conjunction with Bourdieu about possible worldviews (Grenfell, 2008a). Indeed, Bourdieu (1986) believed we can only understand human practices as a holistic totality, via an integrated analytical approach (Tomlinson, 2004). Thus, Cushion and Kitchen (2011) indicated that a Bourdieusian perspective may help us appreciate more fully the complexity of the ongoing coach development process, and the multifaceted interrelationships between coach, other and context.

Much of Bourdieu's career was spent trying to reconcile apparent opposites in social scientific thinking (Grenfell, 2008b), such as dichotomies between theory and practice, objectivity and subjectivity, and agency and structure. Hence, his concepts may be particularly applicable to analyses of the dynamic and interactional complexities of sports coaching; that is, in facilitating a better grasp of the contextualised, embodied, and contested nature of coaching, as an arena for social (re)production (Cushion & Kitchen, 2011).

From a Bourdieusian standpoint an episodic, mechanised, linear view of coaching (as described by Cushion & Lyle, 2010) is incapable of apprehending the richness of lived experience (Cushion & Kitchen, 2011). Furthermore, his work encourages practitioners, such as researchers or coaches, to adopt a reflexive approach in regard to their own sense making, as a means of critically examining both ourselves and our *in situ* assumptions (Riach, 2009). As such using Bourdieu's thinking tools may engage us in a reflexive discourse about how best to evolve as coaching practitioners in the face of social and political developments (Cushion & Kitchen, 2011). A particularly apt metaphor, for this study, that Bourdieu repeatedly uses is that of a person developing a feel for the game (e.g., Bourdieu & Wacquant, 1992).

According to Bourdieu for practitioners to work effectively within a particular domain they are required to cultivate practical sense or practical mastery - manifested in a sensitised feel for the game (Bourdieu, 1998). For this to happen they must first come to an understanding of the nature of the game (Hodkinson et al., 2008), and then deliberate whether to play the game (conform), or attempt to alter the game (rebel), when confronted by practice based issues. However, Bourdieu conceives of actors as being at once shrewd but constrained (Frank, 2012), in that we are both partly free to make choices, and partly not free to do so (Hodkinson et al., 2008), owing to the influence of social forces, and our own habituations.

Bourdieu thus strove to provide a means by which both agency and structure could be recognised and studied (Cushion & Kitchen, 2011), which may be pertinent in investigating the evolving dispositions of expert-like coaches, who are likely to experience alterations in their working environments. Essentially, Bourdieu views the social world as being in flux, with dynamic change at the core of his conceptions (Grenfell, 2008b), and this fits well with the current study, in terms of exploring fluctuations in self-perceptions of expertise. To better appreciate how his thinking tools may assist us in appreciating the causes, and nature of, such fluctuations that expert-like coaches might experience, we need to visit his key concepts, *habitus*, *field*, and *capital* (Tomlinson, 2004), defined in Table 5.

Table 5. Bourdieu's Thinking Tools of Habitus, Field, and Capital Defined (adapted from Colley et al., 2003; Cushion & Kitchen, 2011; Hagar & Hodkinson, 2009; Taylor & Garratt, 2010a; 2010b).

Habitus	<p>A system of dispositions (perceptions, judgements, actions).</p> <p>Deeply embodied internal structures (practical consciousness/mastery).</p> <p>Acquired through long term occupation of a position in a social world.</p>
Field	<p>Semi-autonomous structured space with own rules, power structures, accepted opinions, competition, etc. - frames practice.</p> <p>Context within which people relate and struggle through complex connected social relationships.</p>
Capital	<p>A form of power or agency exercised over own or others' futures. For example:</p>

	Symbolic capital (prestige, honour, attention). Cultural capital (abilities, skills, qualifications). Social capital (authority, position, role).
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Habitus represents Bourdieu's attempt to reconcile how social structure and individual agency shape each other (Maton, 2008). It is viewed as both structured by an individual's past experiences and current situation (a structured structure), and structuring in that it assists in moulding present actions and future possibilities (a structuring structure) (Cushion & Kitchen, 2011; Maton, 2008). The result is a system of durable, but not entirely fixed, dispositions that determine a way of being (Bourdieu, 1977), or subconsciously orientate action (Hodkinson & Hodkinson, 2004). Maton (2008) argues that habitus apprehends how persons bring with them their embodied history, which then affects the range and selection of action choices that feel comfortable in present situations, which in turn contributes to our expanding bank of influencing experiences.

We are thus engaged in an unending cycle of history making, not fully under our own volition, as we choose certain paths in our developmental journeys, based upon not only our current circumstances, but also what possibilities we are able to envision and action, as a result of our accumulated and internalised prior experiences (Maton, 2008). Habitus brings together a person's deep-rooted identity and a less entrenched vocational identity, and, therefore, shapes how we perceive, judge and operate in practice (Cushion & Kitchen, 2011). Hence, we may be disposed to respond in ways that are specific to the regularities of a particular field, but we also retain the capacity for inventive strategic (but structured) improvisation in the face of uncertainty (Maton, 2008). Throughout this process the habitus, as an integral part of who the practitioner is (Taylor & Garratt, 2010b), evolves slowly, as it encounters altered contexts and unfamiliar experiences (Maton, 2008). Given that this process is inevitably a social one, individuals also tend to become complicit in unspoken but taken for granted shared ways of being, or *doxa* (Bourdieu, 1990), in certain domains, and this frames the extent of what may be readily conceived of, or undertaken in practice (Maton, 2008).

Here we link back to Bourdieu's metaphor of a feel for the game, which denotes an attuned practical mastery that may only be developed as a consequence of long term immersion in practice (Bourdieu, 1998). Both Frank (2012) and Cushion and Kitchen (2011) contend that although habitus does not prescriptively predetermine responses, it does dispose the actor to sense (not necessarily at a conscious level) the goodness of fit, synchronisation, legitimacy, or even the obligation of certain ways of behaving. The automatised, effortless, intuition, and tacit knowledge associated with the development of a high level of expertise is mirrored by Bourdieu's (1994, p.63) contention that: "The habitus as the feel for the game is the social game embodied and turned into a second nature." This parallels the common observation that experts seem to be able to do what is perceived to be the right thing in the circumstances (Swanson & Holton, 2001), having experienced dealing with many similar cases (Sayer, 2011).

It certainly seems highly likely that expert-like coaches will indeed be influenced by their own considerable formative experiences, will have been inculcated into culturally specific ways of being, and will have developed their own idiosyncratic beliefs, methods, and practices (personal dispositions) that might be expressed as agency within the coaching role (Taylor & Garratt, 2010b) – so habitus may represent a useful thinking tool for the current study. As Cushion and Kitchen (2011, p.44) express: "Such actors are part of the structure, and the structure is part of them." However, habitus alone cannot explain practice, since it is a relational concept, intimately connected to other crucial notions, principally that of field.

Field is a particular social terrain within which individuals develop their habitus (Bourdieu, 1998; Melville et al., 2011), as they interact and struggle for power with others (Cushion & Kitchen, 2011). Fields are semi-autonomous social arenas which boundary possibilities, given that they feature their own norms, histories, traditions, and discourses (Thomson, 2008). Thus, each field will exhibit its own distinctive logic of practice, whereby a commonly accepted means of explaining things, and certain ways of acting, tend to be imposed upon members, and adhered to (Bourdieu & Wacquant, 1992). However, the field, and its customary rules are also not completely fixed; agents in a particular arena may be regarded as playing an unending competitive game (Kerr & Robinson, 2009) featuring conflict, whereby associated

strategic actions taken in the social field, and in the field of power, may mutually come to reshape the structure of the field at any time (Bourdieu, 1998; Thomson, 2008).

Thomson (2008) recommended that research on fields should be developed on a case-by-case basis. In the current study, the field may be considered as the context within which expert-like coaches work. But one must consider further which fields are applicable, where the field ends, and which sub fields may come into play (Thomson, 2008). For example, we might be concerned with the broad field occupied by expert-like sports coaches, and/or the specific sporting sub field in which they are embroiled. Indeed, Hodgkinson et al. (2008) argued that fields may operate at micro interactional levels, as well as on macro scales, and Melville et al. (2011) found confirmatory evidence of this in that teachers were able to function tactically and concurrently across both specific academic departmental and general science education fields. Certainly, everyday coaching practices and actions will tend to be influenced and shaped by the characteristics and discourse of the contextual field and/or sub field in which they are rooted (Cushion & Kitchen, 2011). While a person's habitus may contribute to them being more or less well suited to the stakes or opportunities involved in a particular field, this relationship is also dependent upon their positions of status within that field (Melville et al., 2011), which brings us to the concept of capital.

Since capital is a form of power allowing individuals to bring to bear control over their own prospects, and those of others (Ritzer, 1996), it implies that opportunities within social settings are not uniformly distributed. For instance, economic capital clearly opens up a range of enhanced possibilities for agency (see Table 5 for further types of capital). Bourdieu was interested in apprehending the inherited and accumulated positions occupied by persons in society that provide advantage or disadvantage, and may in turn lead to differential influence regarding what counts, or is deemed legitimate as capital, in particular settings or cultural exchanges (Moore, 2008).

Pertinent to the current study, it was suggested by Wacquant (1998) that tracking the trajectory of how someone (such as, an expert-like coach) has accumulated capital in moving towards achieving the position they currently occupy (e.g., national coach), may provide insight in regard to social enquiry. Furthermore, attention to the thinking tool of capital may assist in uncovering how status, and by extension the relative

exercise of power, affects practice. Potrac (2004) claims it is not a matter of whether, but how, power is brought to bear in the context of coaching. Accordingly, the existence and sway of capital in coaching settings is generally thought to (re)create difference, as those involved struggle to accrue capital within the field, which has been gradually more attended to in associated literature (Cushion & Kitchen, 2011).

Bourdieu (1986) emphasised that habitus, field and capital are interlinked. That is, an individual's dispositions, plus their current status within the field, situated within that social terrain as its present circumstances are, will interact with each other to determine their practice (Maton, 2008). Hence, Melville et al. (2011) recently utilised all three concepts to draw insights from a case study of educational reform in action. Many other studies have used Bourdieu's key concepts, either in isolation or combination. For instance, Colley et al. (2003) proposed a 'vocational habitus', in explaining how further education students were not only predisposed by their background circumstances towards certain types of vocational courses, but were also then socially oriented towards a particular set of workplace related dispositions, that essentially came together to reproduce inequalities, and constrain ways of being, and behaving (Bourdieu, 1977), in vocational contexts. The resulting sense of knowing one's (supposed) place, and the (perceived) rightness of actions required, narrowed possible horizons for learning, and represents what Bourdieu (1986) described as 'the choice of the necessary.' Furthermore, field has been productively employed in understanding learning and development in specific work-related contexts (e.g., Heslop, 2011).

Cushion and Kitchen (2011) highlighted the potential of Bourdieu's sociological thinking for an improved understanding of sports coaching, but, within coaching related research, until recently, there has been limited direct application of his ideas (Taylor & Garratt, 2010b). Potrac and Jones (2009) briefly referred to Bourdieu and capital in relation to their consideration of the micropolitics of coaching. But, Cushion and Jones (2006) extensively utilised capital to explore discourses of power, and issues of symbolic violence in relation to coaching practices in a Premiership football club. They found not only a dominating discourse that legitimised an authoritarian coaching habitus, and even abusive treatment of players, in the interests of keeping them in

their place, but, also, a willingness to accept such treatment by the players as a result of their own predispositions (Cushion & Jones, 2006).

Over the last five years there has been a burgeoning of articles utilising a Bourdieusian lens to explore sports coaching related issues (see Table 6). However, the application of Bourdieu's ideas to expertise in coaches is as yet rare and indirect.

Table 6. Sources Utilising a Bourdieusian Lens in Recent Years.

Source	Bourdiesian Lens
Claringbould, I., Knoppers, A., & Jacobs, F. (2015). Young athletes and their coaches: Disciplinary processes and habitus development.	How experiences with coaches affected the development of the habitus of young athletes.
Taylor, W.G., & McEwan, I.M. (2012) From interprofessional working to transprofessional possibilities: The new age of sports coaching in the United Kingdom.	How the changing field of UK sports provision affects emerging relationships, struggles and insecurities.
Christensen, M.K. (2013). Outlining a typology of sports coaching careers: Paradigmatic trajectories and ideal career types among high-performance coaches.	How coaches transmit dominant logics of practice, and use and convert cultural capital in their developmental journeys.
Smith, W. (2012). Changing the logic of practice: (re)drawing boundaries, (re)defining fields.	How logics of practice can compete, and may be embodied in the habitus of practitioners.
Cushion, C.J., & Jones, R.L. (2014). A Bourdieusian analysis of cultural reproduction: Socialisation and the 'hidden curriculum' in professional football.	How a complex socialisation process of cultural reproduction can constitute a hidden curriculum in professional football.
Light, R.L., & Evans, J.R. (2011). Dispositions of elite-level Australian rugby coaches towards game sense: Characteristics of their coaching habitus.	How the coaching habitus of elite rugby coaches influenced their utilisation and interpretation of game sense.
Lewis, C.J., Roberts, S.J., & Andrews, H. (2015). 'Why am I putting myself through this?': Women football coaches experiences	

<p>of the Football Association's coach education process.</p> <p>Townsend, R.C., & Cushion, C.J. (2015). Elite cricket coach education: A Bourdieusian analysis.</p>	<p>How coach education contributes to the reproduction of power and inequality</p>
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Christensen's (2009) study on the talent identification practices of top level football coaches in Denmark, drew heavily on Bourdieu's work, in revealing that a process widely perceived as being objective and technically rational in nature, is in truth largely guided by the practical sense of coaches, in informing classificatory schemes that cause talent to become a socially constructed phenomenon. Essentially, this was an exploration of how expert coaching knowledge is used in context, building upon Nash and Collins' (2006) proposition that expert coaches' practices are founded on an intricate intertwining of understanding and recollection, sharpened by accumulated experience and much reflection. Bourdieu's (1998) classificatory schemes are perceptual categories of taste, separating what is regarded as valued, or not valued, in a particular milieu. These, and the reliance of expert coaches on intuitive know how derived from their immersion in the vocational field, rather than analytical principles, were used to explain how talent identification in football is socially configured (Christensen, 2009). Christensen (2009) argues that expert coaches, given their dominant positions, and feel for the game, act as arbiters of taste, and that Bourdieu's work offers a productive framework for understanding the socially constructed logic of practice (Bourdieu, 1990) within coaching.

Taylor and Garratt (2010a) employed habitus, field and capital in debating issues around the professionalisation of sports coaching. In particular outlining how governmental efforts to professionalise coaching may serve to favour some kinds of knowledge over others (such as technical rationality over practical reasoning), and regulated and routinised forms of practice over more organic and contextually derived ways of coaching (Taylor & Garratt, 2010b). Bourdieu (1988) explained how dominating institutions can enforce forms of regulation that can act to control what is considered valid knowledge, and redefine what forms of capital are valued and necessary. In this way an autonomous holistic problem solving praxis may become subsumed by a more mechanistic and technocratic approach that features fragmented

knowledge (Taylor & Garratt, 2010a). And so, established forms of capital in the coaching field may come to be contested, as efforts to promote the vocational status of coaching alter existing structures, and in turn incur socio-cultural consequences (Taylor & Garratt, 2010b).

In this way coaches are prone to feel insecure about their position in the newly configured field, and their identity as practitioners may be threatened by change (Taylor & Garratt, 2010a). Resulting constraints on coaches could signify that, if they are not able to subjugate themselves to altered values and imposed identities (Foucault, 1977), then they will struggle to maintain occupational freedoms, coaching efficacies, and the ability to exercise professional judgements on what may be best in practice (Taylor & Garratt, 2010a). Thus, rather than being valued as independent educators and intellectuals, as Taylor and Garratt (2010a) recommend they should be, sports coaches may come to feel diminished, and suffer a sense of disengagement, as a result of changes in social and power relations, that could even cause them to abandon their roles. Bourdieu referred to this type of potential culture shock as hysteresis (Cushion & Kitchen, 2011; Hardy, 2008), and this could prove a powerful means through which to apprehend how expert-like coaches might experience fluctuations in their self-perceptions of expertise.

2.41 The Hysteresis Effect – Lacking a Feel for the Game

Hysteresis may be viewed as Bourdieu's attempt to consider the effects of social change, and represents a form of disturbance between a particular field and the person's habitus, which results in a sense of disconnection, not feeling fully in touch, or perceptions of alienation (Hardy, 2008). Thus, the hysteresis effect represents a personal encounter with a social environment uncomfortably altered from that which the individual is accustomed and attuned to (Bourdieu, 1990), resulting in the lack of a feel for the game. Hence, Hardy (2008) claims that the concept of hysteresis connects objective systemic changes in the field, with subjective individual responses to those changes, as manifested in an altering habitus. Accordingly, it may assist in apprehending: "...the nature and consequences of field changes as experienced personally at a social environmental level." (Hardy, 2008, p.148).

Given that change is inevitable in most fields, and, therefore, habitus is subject to constant transformation and flux (Bourdieu, 1994), hysteresis is thought to be typified by a mismatch between the field and habitus that is associated with a temporal delay, whereby there is a lack of synchronisation, which has been described as indolence in the habitus (Hardy, 2008). While changes in the field may offer fresh opportunities, they also can represent a significant threat, in that the future becomes more indefinite (Hardy, 2008). When a field shifts somehow, such that what is considered legitimate is altered, the habitus may become disrupted or dislocated; an individual's stock or capital within the field may decline to disturbing effect, such that their power or perceived legitimacy is quickly diminished (Hardy, 2008), and the world seems to suddenly have passed them by (Grenfell, 2008b). Resilient ways of being developed by individuals in a particular social setting simply cannot be anticipated to alter at the same pace as adaptations in the field; rather, the habitus is likely to undergo a more gradual creative adjustment to altered circumstances (Maton, 2008).

Bourdieu's (1988) most prominent example of hysteresis related to academics in French Higher Education, who were observed to be clinging to an outmoded habitus, despite considerable change in their working context. Hence, Bourdieu (1980) referred to unadapted dispositions as the enduring presence of the past in relation to a changed environment or role. However, it is also conceivable that the volatility of social conditions could result in the dynamics of change being in the opposite direction. That is, progressive individuals or groups might successfully articulate the direction of change within a field. Extraordinary individuals (such as experts) might literally change the game within a field through transformative ways of being. For instance, we refer to individuals who seem to be ahead of their time – such as Boxall and Turner's (2010) portrayal of how one international cricket coach radically changed the orthodoxy of how the game was coached. Although even this seemingly positive mismatch between habitus and field may prove dangerous if new ways do not come to be accepted, or if the visionary lacks the capital to effectively implement them (as in the case of Australian athletics coach Percy Cerutti, who despite being a successful maverick practitioner, was regarded with suspicion and largely rejected and marginalised by the authorities of his time (Sims, 2003)).

In his later writings Bourdieu intimated that in modern society hysteresis is more likely given: "...that the coincidence between structure and habitus is increasingly disrupted." (Mesny, 2002, p.65). Notwithstanding, Kerr and Robinson (2009) highlighted how the hysteresis effect could actually help us to better understand an altered environment based on a transformative relearning and creative adaptation of our existing habitus. Furthermore, although Bourdieu considered the habitus to be, to some extent, transposable to other fields (Maton, 2008), the practitioner who crosses field boundaries (as Sir Clive Woodward did in moving from business to rugby coaching (Woodward & Potanin, 2004)) may need to readjust their social prudence to subtly different conditions in order to sense the rightness of their situated actions.

Despite Bourdieu's (1980) assertions that practical sense is largely a non-reflexive means of making sense of the world effectively in the moment, Mesny (2002) contended that practitioners are capable of developing theoretical and reflexive stances in their everyday practices that extend far beyond practical sense, while Kerr and Robinson (2009) claimed that adapting the habitus during a period of transition can be a conscious and reflexive process, especially if academic capital has also been attained. Finally, however, returning to Taylor and Garratt's (2010a: 2010b) work on the professionalisation of sports coaching, if certain forms of knowledge are privileged over others in this process, then it is possible that the practical wisdom of expert practitioners could become devalued. It is here that recent reconceptions of the Aristotelian concept of phronesis may additionally be relevant to the current study.

2.5 Phronesis

The modelling of the social sciences on the natural sciences is now under serious reconsideration; given the complexity and mutability of human interactions generalised predictive models, such as those used in describing the natural world, are increasingly thought to be inappropriate in regard to their emulation within social inquiry (Flyvbjerg, Landman & Schram, 2012a). As Geertz (2001) has observed something different is required to bring to light how people think, feel, act, learn, interrelate, and ascribe meaning to their experiences. Flyvbjerg (2001) developed the idea of phronetic social science, as a novel perspective on social inquiry, featuring a modern reading of the Aristotelian concept of phronesis to encompass issues of power; and this approach

has subsequently grown in influence¹⁹. In action applied phronesis features a reflexive examination of power and values, signifying a refreshed potential significance and impact for social studies; as such phronetic social science represents a new and blossoming area of research, proposed as being well suited for those who desire to make a real-world difference to practice and policy (Flyvbjerg, Landman & Schram, 2012b).

In relation to Aristotle's three intellectual virtues (1998), while the natural sciences give emphasis to episteme (universal truth from theoretical knowledge) and techne (technical knowledge or know-how), phronesis (practical wisdom or prudence) is championed by Flyvbjerg (2001) as a socially pertinent form of knowledge thus far largely neglected by social scientists (Landman, 2012), which ought to be cultivated in contemporary social research, since it guides how to deal with and act upon social issues in specific situations or settings. As Thomas (2011, p.23) articulates, phronesis seems to be manifested in the practitioner having the: "... ability to see the right thing to do in the circumstances." Similarly, Halverson (2004) claims that the acquisition of a 'phronetic eye' is an apt metaphor for how persons, in the fullness of time, come to recognise certain situations as worthy of investing their energy in, and consequently develop intervention strategies that effectively address problematic conditions encountered therein.

Thus, Flyvbjerg (2001) argues that phronesis is requisite for intelligent and appropriate social action, and is characterised by the following: "Ethics. Deliberation about values with reference to praxis. Pragmatic, variable, context-dependent. Oriented towards action. Practice. Based on practical value-rationality." (p.57). As Halverson (2004) indicates phronesis can hence offer a framework for better appreciating and demonstrating how practitioners comprehend and apply principles within practical contexts. This necessitates employing investigative means of apprehending, and representing, a sense of how complex practice is applied in localised settings, such as Geertz's (1973) thick description, case studies (Thomas, 2011), and detailed narrative analyses (Landman, 2012). As such the researcher who adopts a phronetic social

¹⁹ Hammond (2002) reinforces the importance of Flyvbjerg's (2001) *Making Social Science Matter*, in which the author develops the idea of phronetic social science, by highlighting that no less a figure than Bourdieu endorses the approach on the book jacket, a year before his death.

science orientation is concerned with the particularities of situations, with localised detail, and micro-interactions, in order to better understand practice in context (Flyvbjerg, 2001). However, it should be noted that Flyvbjerg (2001) has acknowledged that a good deal of research that is phronesis based, or phronesis-like in aspect, has previously been undertaken, which can be built upon by researchers. Among those he alludes to are Giddens, McIntyre, Dreyfus, Bourdieu and Foucault (Flyvbjerg, 2001). Work on the relevance of phronesis in particular vocational settings has also been completed.

Benner et al. (2009), in the context of nursing expertise, discuss how practical nursing requires both *techne* and *phronesis*. Relatively straightforward clinical assessments, although they may require experience based craft and skill, can effectively be undertaken on the basis of *techne* alone, but, in nurse-patient interactions whereby critical judgements about changes in status are required, and well synchronised relationships and perceptual insight come to the fore, *phronesis* is deemed essential (Benner et al., 2009). Benner et al. (2009, p.xv) indicate that while *techne* may be captured in procedures, and technical knowledge is able to be measured and made explicit, *phronesis* is more elusive, and is characterised instead by: "...practical reasoning engaged in by an excellent practitioner lodged in a community of practitioners who through experiential learning and for the sake of good practice continually lives out and improves practice."

Such engagement with experiential learning necessitates a committed constant learner, who is receptive to new opportunities to improve and transform practice, rather than merely a technician with predetermined solutions, and a requisite toolkit of established skills to be applied (Benner et al., 2009). The Dreyfus model (Dreyfus & Dreyfus, 1986) of human learning (although a linear staged model of expertise development) illustrates that practitioners who cultivate an attuned context responsive approach come to perceive conditions holistically in relation to diverse and rich previous experiences. However, the accomplished practitioner also comes to apprehend that initial understandings of conditions may need to be revised and reshaped, so that tacit expectations do not fossilise actions when the unexpected occurs (Benner et al., 2009).

Thus, Benner et al. (2009) assert that recognising and responding to the unanticipated may be a defining feature of expertise, mirroring Schempp and McCullick's (2010) observation that expert coaches attend to the atypical in their practice environment. Accordingly, Benner et al. (2009) established that in nursing, responding to the particularities of a situation is fundamental to understanding its nature, and hence to the practical reasoning that Bourdieu (1990) asserts characterises the logic which guides excellent practice. As Halverson (2004, p.93) expresses, applied phronesis involves the practitioner having to: "...adjust knowledge to the peculiarity of local circumstance." Or as Flyvbjerg (2001, p.43) states more generally in relation to social phenomena: "...there is an open-ended contingent relationship between contexts and actions and interpretations."

This returns us to Flyvbjerg's (2001) contention that rules based rationality based on universal theories and analysis has become privileged over experience based intuition, and that we should recognise more fully the equal importance of factors such as context, judgement, and common sense. One might question why phronesis has come to be neglected in this way. Flyvbjerg (2001, p.23) provides an explanation when he states that the dominance of rationality has 'made invisible' other ways of knowing. That is, properties such as intuition or wisdom, while often associated with expertise (e.g., Dreyfus & Dreyfus, 1986), are difficult to capture, and intangible, and hence may have lost prominence in modern society where accountability and measurement of outcomes associated with professionalisation have attained precedence (Sayer, 2011; Taylor & Garratt, 2010a, 2010b). Indeed, phronesis as a research approach has been criticised for its potential vagueness (Geertz, 2001), while even Flyvbjerg admits a need for further methodological and theoretical fine-tuning (Hammond, 2002).

Nonetheless, consideration of phronesis has recently called into question the pre-eminence of evidence-based practice in vocational settings (Flaming, 2001; Standal, 2008). While underpinning research remains eminently necessary, it is not considered sufficient on its own for the nuanced weighing up of contextual detail, and morally informed action, required of practitioners (Flaming, 2001). In relation to adapted physical education Standal (2008) outlined the limitations of evidence-based practice for educators operating in conditions of unpredictability and flux. Flaming (2001) asserted that the uncritical use of research findings, and the over privileging of

evidence based knowledge over unscientific (intuitive, ethical, and experience-based) ways of knowing, could result in inapt nursing practice.

At its worst an over emphasis on evidence based practice could act as an oppressive force of power, and devalue the accomplished practitioner who deals well with the indeterminacy of real world demands. Drawing upon Aristotle's statement that the purpose of personal phronesis is to promote human flourishing, Flaming (2001) argued that the goal of nursing practice would be steered by an aspiration for patient well-being. One could similarly argue that the coach employing phronesis might be guided by a desire for athlete flourishing, although, this presupposes (rightly so in relation to most practitioners I would assert) an ethically informed dimension to the coach's decision making.

Gallagher (2007) claims phronesis and expertise are somewhat alike. Both are embodied forms of know-how which are not equivalent to theoretical intellectualisation, may not be represented in a rules based system, and cannot be captured by computer modelling (Gallagher, 2006). The phronimos (one who exhibits phronesis) and the expert both sense what to do instantaneously, and are able to act in an apparently autonomised manner, and both habituate and manifest their abilities in conditions of social practice (Gallagher, 2006). However, while phronesis and expertise may be similar, they are not the same. Phronesis denotes an ethical dimension to decision making – a requirement to do the morally right or good thing - since the phronimos is unable to act against their own better judgement; whereas an expert may decide for whatever reason to act in an unethical way, without necessarily endangering their status (Gallagher, 2006; 2007). It is not merely a matter of deciding how to achieve a certain state of affairs, but also the capacity to deliberate upon outcomes consistent with that perceived as the moral good. That is, it is the character of the person rather than their expertise that leads to ethical behaviour (Gallagher, 2007). The expert may or may not act virtuously in dealing with issues.

Gallagher (2006) makes the distinction that expertise is directed at problems, while phronesis is directed at a mystery (that of the situated principled self that is essentially unknowable, and subject to change). However, Halverson (2004) points out that

phronesis is also expressed mostly in relation to problem solving²⁰, and one might also contend that expertise is similarly unattainable and plastic. Although Gallagher (2006) argues that becoming an expert would not necessarily change the person, this seems unlikely if the nature of expertise is indeed interactionally embodied and intersubjective as he claims. At the very least, nascent experts would need to be highly committed to invest the considerable time and energy required in promoting their own development, and this investment of the self, would surely incur a concurrent modification of the self to some extent. Furthermore, if we consider coaching specifically, while novices might be more rule-based and principle guided, those who are more expert-like would be likely to feature a personal interpretation of the coaching process based upon their own established coaching philosophy. Hence, Flaming (2001) asserts that phronesis is applied on the basis of deliberation founded upon both prior experiences, and knowledge of one's self (in terms of values, assumptions, etc.), and the same could be reasonably claimed of expert-like coaching. Given that phronesis and expertise share several commonalities it may be worth considering how phronesis might be acquired.

Halverson (2004, p.94) contends that: "In order to learn phronesis we must be able to see it in action". This implicates long-lasting social interaction with those acknowledged as exhibiting practical wisdom, usually in some form of mentoring or apprenticeship relationship, typically situated within a community of practice. Note that Cushion et al. (2003, p.217) observe that coaches: "...often serve an informal apprenticeship of prolonged observation." Engagement in such multifaceted social webs can be restricted, unstable, resource intensive, and long term. However, the would be phrominos is compelled to be immersed in practice, mix with appropriate role models, imitate their actions (Standal & Hemmestad, 2010), learn from example on a case by case basis whilst attending to differences, and cultivate their own idiosyncratic practices in action.

²⁰ Note how similar this quote from Seifert et al. (1997, cited in Halverson, 2004, p.95) on expertise in problem solving is to aspects of phronesis, but note also that there is an absence of reference to personal values and ethics. "Experts are able to use their models to understand the nuances of situations lost on novices and to recognize emergent opportunities for action in complex situations."

While it is possible to learn principles that might guide action, and gain insight from case based education, the flexible application of these to real world uncertainties necessitates hands on practical experience. Such learning effectively never ends, as one can never fully come to terms with the particularities of any situation that might be encountered. Phronesis involves praxis, in which experiential knowledge is utilised and acquired, such that having phronesis is reliant upon practicing phronesis (Flyvbjerg et al., 2012a). Hence, Standal and Hemmestad (2010, p.52) propose that phronesis: "...is a form of knowledge that can be acquired ...when one acknowledges the incompleteness and fallibility of knowledge." Insofar as intimate acquaintance with practical contexts are able to be apprehended, such local knowledges are emergent from practice, rather than able to be taught (Schram, 2012). Thus, Frank (2012) contends that phronesis may not be achieved through merely adhering to instructions, but only by promoting change within oneself.

Halverson (2004) used the concept of phronesis to investigate the practices of successful school leaders, discovering it was a useful framework with which to explore and communicate what these accomplished practitioners know, and do, in practice. However, he also reported that practical wisdom is very difficult to represent, and suggested that phronetic narratives of how procedures, policies, and programmes (termed artefacts) that the leaders intentionally designed were developed in successful practice, might act as an insightful resource for other aspiring practitioners in the area (Halverson, 2004). This could hold promise for representing the everyday experiences of expert-like coaches.

Frank (2012) illustrates how everyday human action in dealing with routine and unanticipated events is reliant upon phronesis, by drawing upon Bourdieu's metaphor of a feel for the game, and Foucault's concerns about power. He explicates how Bourdieu's concept of habitus may be viewed as akin to phronesis, in that it represents embodied practical wisdom that disposes the actor to feel the rightness of responses to circumstances encountered (Frank, 2012). Since habitus allows for both habituated actions and strategic improvisation, it allows an individual to respond to the expected and the unforeseen, in a partly constrained but partly shrewd way (Bourdieu (1990)

asserted that people are not fools – they will change their habits when they do not match well the situations they find themselves in).

Frank (2012) also explains how Bourdieu's concept of *illusio* may be understood as comprehending what the stakes are in the game one is caught up in, and the extent of one's personal investment in taking those stakes seriously. While Bourdieu regarded the logic of practice of a field as itself an illusion, based on the interests that underlie it (Grenfell, 2008c), one must, nevertheless, commit to the supposed reality of ways of being in the field to conform and adhere to expectations. Frank (2012) discusses how social science researchers must suspend one field's *illusio* (the academic) in order to distinguish the stakes of another (the everyday). In other words such movement between fields represents the game that scholars must develop a feel for, in coming to appreciate what the stakes are for others (Frank, 2012). Similarly, expert practitioners who cross boundaries in regard to their field must reflexively adapt their *illusio* to the new game conditions, or the different logics of practice, encountered, if they are to maintain practical wisdom, their status as experts, and avoid hysteresis (lacking a feel for the game).

Foucault emphasises that we need to be aware that everything in our lives is dangerous, and this exemplifies that we must employ phronesis to avoid being ambushed by power, or harness it where possible, to live as freely as we can through attentiveness (Frank, 2012). While Foucault regards danger as ubiquitous, to the extent that individuals live out their lives in company with various truths that seek to preside over them, and they are constrained to choose between actions which inevitably involve some element of danger – they still retain the freedom to choose wisely, to weigh need against risk, to question the available courses of action, and to identify and avoid the greatest jeopardy (Frank, 2012). For Foucault there is no existence outside of power relationships, which may subjugate and marginalise individuals if they do not fit well imposed institutionalised expectations of ways of being (Frank, 2012).

To link to a specific coaching example, Curzon-Hobson, Thomson and Turner (2003) described how the rise of biomechanics in New Zealand cricket radically altered demands on, and expectations of, coaches, and marginalised certain coaching

qualities associated with care, trust, and pedagogy. The legitimisation of the discipline of biomechanics constrained the ability of coaches who were not willing to become its disciples to flourish, and disempowered them (as well as devaluing their existing expertise) (Curzon-Hobson et al., 2003). This represents a clear example where scientific theory and technical knowledge were privileged over practical wisdom in coaching. For Frank (2012) phronesis becomes a matter of attempting to understand conditions as an ongoing problematic process; there are always choices and decisions to be made, particularly in confrontations with power, and we must constantly balance what is at stake (*illusio*) within a changing game (and, hence, as in the above coaching example, a changing logic of practice). In a parallel with conceptions of intuition as a characteristic quality of expertise (Dreyfus & Dreyfus, 1986), Frank (2012) concludes by asserting that the most refined phronesis would inform action prior to the moment of choice. Such a superior feel for the game is illustrated by Bourdieu (1998, p.79): “Like a good tennis player, one positions oneself not where the ball is but where it will be.”

The phronimos is developed via a succession of confrontations where the stakes are high, and phronesis becomes necessary and evident (Frank, 2012). The concatenation of such episodes produces a slow but sure alteration in a feel for the game, and, thus, informs subsequent actions. However, while the choices open to an individual are constrained by the field conditions, guided by the habitus, and informed by the *illusio*; phronesis is also relational, in that choices are affected by relationships with others in the social world (Frank, 2012). Hence, Halverson (2004) has intimated that we may regard phronesis as not merely the possession of isolated individuals, and, therefore, a social and vocational situatedness of phronesis are implicated.

2.51 Phronesis and Sports Coaching

Standal and Hemmestad (2010) considered the relevance of phronesis in the context of sports coaching, claiming that a science driven technical approach to practice, and a conception of good coaching as being consistent with success and results (rather than virtuous actions) tends to prevail. They assert that dominant coaching science, and how-to-coach (recipe-like), approaches, downplay the contextual contingencies of coaching, and the uncertainties of human interactions; in contrast, phronesis is able to better account for the real-world variability of coaching practice, and represents the

individual's embodied knowledge and morals enacted through performance (Standal & Hemmestad, 2010).

Thus, coaches who exhibit phronesis may be better equipped to deal flexibly with the inevitable flux and ethical dilemmas that the messy world of coaching practice presents (Standal & Hemmestad, 2010). Elsewhere, Standal (2008) has recommended that we should celebrate the insecure practitioner, who is able to effectively balance knowledge of universals against understanding the particularities of situations encountered in exercising professional judgements. This requires an acceptance of inevitable uncertainty (alongside certain regularities), and an openness to engage in constant learning and revised self-understanding, to cope better with working in conditions of unpredictability (such as those inherent in coaching) (Standal, 2008).

Hemmestad, Jones and Standal (2010) suggested that phronetic social science may be an appropriate framework through which coaching can be examined, and in particular may address the theory-practice gap related to coach education that currently fails to fully account for the complexity and social intuition of coaching practice. That is, an improved means of studying sports coaching must be established, so as to inform more realistic and sophisticated coach education provision. Phronesis has several potential advantages in this regard:

- it allows for the exploration of both structure and agency
- as per expertise, it cannot be condensed to universal truths
- it recognises that coaches are idiosyncratic and never the finished article
- it does not assume linear development; progress is likely to be contingent and complex
- it links well to Standal's (2008) ideas about the insecure practitioner, and Flyvbjerg's (2001) notion of the virtuoso social actor
- it also reflects Bowes and Jones (2006) metaphor of the coach working at the edge of chaos, where conditions are unstable

(Hemmestad et al., 2010)

Because a phronetic social science approach would uncover powerful examples of the localised everyday wisdom of coaches, it would provide insight into the micro detail of real world issues, and potentially illuminate how they might be addressed (Hemmestad et al., 2010). Case studies in particular have been recommended as a productive means by which context dependent knowledge may be represented, and drawn upon in informing the practical wisdom of others (Flyvbjerg, 2011). In a recent case study of an athletics coach phronetic ways of knowing were observed to work alongside techno-rational orientations in guiding practice (Barker-Ruchti et al., 2014). It was concluded by Barker-Ruchti et al. (2014) that the value of phronesis is underplayed, and a greater appreciation of its importance could strengthen the coaching profession. To remind the reader multiple case studies of expert-like sports coaches in their long-term developmental journeys will be employed in the current study.

A phronesis-like investigation by Christensen (2014) focused upon gathering stories from coaches about their learning and development as experts; narratives were used in exploring the coaches' biographical experiences. It was revealed that suggested distinctions between typologies of coach learning became blurred in real life, and different learning situations were instead interwoven within the learning biography; furthermore, the most potent learning sources for experts seemed to relate to mentors, role models, and dialogue with fellow coaches (Christensen, 2014). Moreover, coaches were observed to be responding to, and internalising, learning through a biographical learning process, in which the individual actively recreated the coaching self in a constructionist and autopoietic²¹ manner. Christensen (2014, p.17) summarised the development of coaching experts as: "... personal journeys in authentic learning situations", and recommended the provision of 'breathing spaces' to assist practitioners in having greater proclivity to learn effectively along the way²².

While Christensen's (2014) study seems analogous with the current one, it crucially did not explore the expert coaches' development over a period of time, and adopted a

²¹ Autopoiesis is a term referring to a system capable of self-creating and maintaining itself; originally conceived of in relation to biology (Varela, Maturana & Uribe, 1974), but subsequently applied in sociology (e.g., Luhmann, 1990).

²² A thought arising is that if there is no leeway to take a breathing space to oxidise perceptions of expertise, then development may stagnate or regress. In connection with this Christensen (2014) indicates that the sense of expertise is not fixed, but changes against the backdrop of biography and context.

single interview cross-case design, rather than a multiple interview multiple case study approach. However, the autopoietic aspect is particularly interesting, in that Christensen (2009) likewise found that top level football coaches valued autotelic youth players (those exhibiting a perceived greater potential to learn and improve); while Knayazeva (2001), in more broadly considering the self as a non-linear dynamical structure-process, discussed how life itself may be an autopoietic activity, since humans are always searching for elements perceived as being missing, in a longing for completion. This might have resonance for the qualities needed by expert-like coaches, since we know that such practitioners are characterised as independent and autonomous constant learners, who are required to adapt an evolving habitus, to an also evolving field, where shifts in capital may occur, in striving to cultivate and maintain a practical wisdom related to the implementation of right practice. Such demands would not only seem highly likely to promote a sophisticated self (re)creation process, but would also seem liable to lead expert-like coaches to experience fluctuations in their self-perceptions of expertise.

Finally, Christensen (2013) recently criticised staged models of coaching career development, implying a linear, step by step, progression through set milestones, as inflexible and unrealistic. In her study, the developmental stories of Danish high performance coaches, only partly corresponded to Ericsson et al.'s (2007) staged career model, and exhibited significant variation in terms of prior athletic careers, early or late engagement with coaching, and individualised learning journeys (Christensen, 2013). However, non-chronological recurring developmental themes were revealed, such as interaction with mentors, and (drawing upon Bourdieu's work) the conversion of capital (Christensen, 2013). Christensen (2013) hence suggested that a typology of coaching careers might be a more appropriate conceptualisation, to model and provide guidance for aspiring coaches.

Thus, it was proposed that the elite-athlete coach was able to transmit cultural capital from previous athletic achievements, the academic coach could derive capital from potent combinations of theory and practice, and the early-starter coach may draw capital from an earned reputation (Christensen, 2013). While this paper is an interesting contribution, and a step forward in our alternative thinking about the possible development of coaching expertise, it could be argued that one overly

simplistic representation might be being displaced by another slightly more flexible one. That is, does the proposed typology, founded upon one particular national sporting culture, account sufficiently for the rich diversity of coaching careers, and should we present idealised career pathways based on others to be modelled, or allow coaches to explore their own pathways towards expertise, and become themselves in the process? For example, could a coach not conceivably accumulate capital from athletic accomplishments, applied academic understandings, *and* early coaching experiences? It seems unlikely that the phronesis derived from such powerful mixtures of distinctive formative influences could be bounded or apprehended fully by a typology. That is to say, phronesis is process oriented rather than reflecting an outcome state, resonates with holistic coaching, and, therefore, precludes a one size fits all approach (Barker-Ruchti et al., 2014).

Notwithstanding, Christensen's (2013) investigation did feature interview derived findings, presented in narrative formats reflecting coaching biographies, in an attempt to effectively portray the complexity and diversity of career pathways experienced by coaches, as is the intention with this study. Nevertheless, despite these methodologically similarities, my investigation will uniquely adopt a longitudinal revisited reflexive approach (rather than a one-off retrospective snapshot), focusing upon the fluctuations in perceived expertise experienced by expert-like coaches in their long-term developmental journeys, and what meaning we might make from their stories about how the ongoing learning and (re)development of expert-like coaches might be better supported and facilitated (the methodology and methods of the current study follow in Chapter 3, after the next Reflexive Interlude).

Reflexive Interlude 2 - Postcards From the Journey

Here I continue my autoethnographic reflections with a consideration of my unfolding career in education, followed by some meaning making on the basis of the story presented, and how it might help to address some key reflexive questions about my reasons for undertaking the study.

It is the first day of my secondary school teaching experience, and I have had the misfortune to be placed by Avery Hill College of Education at Catford Boys', a school with such a bad reputation that it is to be summarily bulldozed and replaced by blocks of flats within a couple of years. On my pre-visit I had been shown around enthusiastically by one of the PE teachers. He took me on a bizarre tour of the sports facilities and classes, challenging the most able pupils at each one, and relishing thrashing them at table tennis, basketball, etc. "*I love this job!*" he said. I was utterly bemused. Was this a wind up? Did he really think that this was all education was about? I was at least heartened that I could offer something more positive than this. But I got more than I expected almost as soon as I actually started there.

"*I'll slice your belly open!*" threatened the pupil, hanging off of the changing benches, and swishing a knife through the air in glinting arcs, like some parody of a pirate. I know that my response now will determine how the entire teaching practice unfolds, almost before it has begun. But I need to assess how to proceed with extreme caution. I detect something in his eyes that doesn't match the bravado, and instead of taking the step back I was contemplating, I move towards him. "*Come on then.*" I say. No return aggression, just an abundance of confidence, which I sense he lacks underneath. It still isn't an easy matter to safely move in and disarm him. But I am by this time I am quite an accomplished martial artist, and as soon as I had seized the initiative the outcome was inevitable.

I am immediately hauled over the coals by the authorities at both the school and the teacher training college, and told in no uncertain terms that taking the weapon off the pupil was absolutely the wrong thing to do in terms of expected procedures. But once again I detect that all is not as it seems. There is no actual punishment coming my

way as a result, and there is an unspoken but distinctly tangible impression that my actions are secretly approved of. Then something strange happens. I start getting allocated to a succession of the very roughest schools, first for further placements, and later as a supply teacher for the Inner London Education Authority. I imagine that in some dusty office there is a personal file on me, with some sort of note therein, marking me out as a kind of educational troubleshooter. Whatever the veracity of that, I end up cutting my teaching teeth in some severely testing environments, and actually start to develop a flavour for such challenges. Later I get a letter from the ILEA offering me two options for my first full time teaching post. Someone seems to have taken pity on the gunslinger, as one of the schools offered features well performing students, and is situated in an affluent area. However, I choose the harder path, and embrace the challenge of adding value in the difficult circumstances of an East London comprehensive. It proves to be possibly the best five years of my working life, despite urban deprivation, disadvantaged immigrant populations, and discipline problems.

One day in the staff room I am being consoled and given sound advice by an old educational matriarch who has taken me under her wing. I've just managed to sabotage my own chances of getting a Head of Upper School position. But as she points out to me it is amazing that I have even got an interview for it after only two years of teaching. Before I was even out of my probationary period I had already been given a feral final year tutor group, and did quite a job of transforming them. In one early tutorial session I walked them through Mile End graveyard to a mystery destination. Two pupils became increasingly twitchy the further we went, and sure enough when we did get to the police station I had arranged to visit they were already well known. But the tour of the stables was well received by all, and one of our party eventually became one of the first members of the Bangladeshi community to join the police force as a serving officer.

During a HMI visit, a fight broke out in my class, and when the Inspector asked why I had not followed disciplinary procedures further after breaking things up, I replied that if I did then that would be all I would ever do. It was a relief when he smiled and said "*The strongest trees bend in the wind.*" On another occasion, I came unnoticed towards my tutor group lined up outside our classroom, ready to enter. Two of the girls were looking at another group lined up opposite, and one said "*Oh, look at that lot with*

no ties on. It's such a shame. Their tutor just doesn't care." It was really satisfying to have raised standards, but to be recognised as having done so because I cared was priceless for me.

Spurred on I quickly took on acting roles as Head of Year, and then Head of Upper School. Largely secured because firstly a succession of colleagues succumbed around me to stress related illnesses, and secondly not many others wanted to actually take on the responsibility (probably wisely). Once again I proved an unlikely success, encouraging better academic performances, and bringing staff and students closer together by piloting the London Record of Achievement scheme. Only to then naively assume that I would get the permanent role on a plate, hence underperforming badly at the interview. Thus, the pep talk from the matriarch on my teaching career in the staff room. I get some great advice about the importance of maintaining my own enthusiasm, taking on new challenges, and not getting stale. The message is to keep dodging the stress, and not get stuck in a rut. *"Don't stay anywhere more than five years!"* she says *"If you haven't achieved what you wanted to by then, and your role hasn't changed, then you probably never will anyway."* It seems to make sense to me. I can already sense teaching is hard enough, without banging your head against a brick wall. I see another colleague later. *"You're a great teacher."* he says, *"You should have your own department."*

I throw myself into work (in several urban youth centres as a sports coach, as well as at school) as my first marriage slowly unravels and fails. I keep moving as advised, never staying anywhere much beyond five years, and generally progressing. I become a Head of a PE Department, then a Sports Development Officer (working for Essex County Council Community Education), an FE Lecturer, and finally a HE lecturer. At the same time I enrich my coaching awards and experiences with a broad variety of sports and client groups, and build a new and happier life. Nowadays I have over a quarter of a century of trying to add value to others through coaching and teaching behind me, both of which I view as educational and complementary, although also distinct. Indeed a common thread throughout my educational career has been striving to meet the challenge of facilitating others in getting the best out of themselves. Thus, I have had the privilege of having coached athletes who have gone on to represent their country, facilitated the development of coaches who have subsequently coached

at national level, and supported students who have attained first degrees and progressed to postgraduate study. Along the way I have also developed my own abilities, beliefs and qualities; however, simultaneously the context has inevitably shifted around me, with, for instance, education becoming more commodified, and coaching more professionalised. As I have changed, and helped others to change, so change has surrounded me too. The journey continues, but the traveller is altered, and the landscape is transformed.

Why Study an Educational Doctorate?

As I hope the above story illustrates education has been a significant part of my life (both in the education sector itself and sports coaching – please assume I mean both when I use the term education/educator from here on). In some ways my work as an educator was a form of salvation in my earlier life, and over the years I have developed a love for (and track record of) helping others to grow, develop, and be that best that they can be. In contrast to that first job as a milkman, education has been a constantly varied and complex challenge. Never mastered, but always absorbing, and intensely rewarding (when things go well).

However, politically, I often find education difficult to deal with. For example, it sometimes feels that I am constantly bombarded by a range of new initiatives, each driven by a fervent zealot with their own precious agenda (but not necessarily mine). On top of this the job is to a large extent boundaryless (Arthur, Khapova & Wilderom, 2005), such that you can find yourself pulled in several competing directions at once; and the roles mean different things to different people, as well as changing over time, demanding that the practitioner must be a 'flexpert' (van der Heijden, 2003).

Given this it occasionally seems that one succeeds as an educator in spite of the system rather than because of it, and personally rewarding moments can be few and far between. Thus, I have the greatest admiration for my colleagues in education who face complexity, uncertainty, and political turbulence, while (in most cases) trying to do the right thing, and stay in a (changing) game. So, why an Educational Doctorate? Because I need to renew myself in order to keep helping others, and stay in the game. Because education is a fascinating challenge, and ripe ground for worthy and valuable

study in my opinion. And because a vocationally focused doctorate in an area that I have given the vast majority of my working life to, and that I remain passionately engaged in, seems to make sense/to be a good fit.

Why Study Coaching? Why Expertise in Coaching?

Sports coaching is a subject domain that has grown exponentially in terms of academic literature over the last forty years (Gilbert & Trudel, 2004). Coaching has come to be conceived as highly complex, even chaotic (Jones, Bailey & Thompson, 2012), and the coach is now regarded by many as a pedagogue or educator (Jenkins, 2006). As my story illustrates sports coaching has been an important part of my personal journey as an educator, and has expanded over the last twenty years or so into a coach education role. Thus, one may view my own long term journey as an educator as one towards expertise (although I by no means consider myself anywhere near the finished article). Not only this, but I have also now become a humble part of the developmental journey of others towards expertise (students, athletes, and coaches).

So, I view coaching, and coaching the coaches, as a fascinating wide ranging challenge, and an area well suited to the reconsideration of expertise because of the highly interpersonal nature of the job, and its inherent uncertainties. If I am to drive forward my own effectiveness as a coach educator, and best support/inform the development of others, then a detailed consideration of how expertise is developed within coaching is likely to be instrumental in this. Plus, such a study may inform how to better support the ongoing learning and development of expert-like sports coaches (and those who might aspire to become expert-like).

Chapter 3: Methodology/Methods

3.1 Introduction

This chapter outlines the methodology and methods (see Table 7 overview) employed to explore how self-perceptions of expertise among expert-like sports coaches may develop, regress, and redevelop over time within the context of coaching in the light of recent reconceptualisations of expertise, expertise development, sports coaching, coach development, and adult learning.

Table 7. Overview of Methodology and Methods.

Methodology	Methods
Ontology = Constructionism	Reflexivity Tools (reflexive diary, etc.)
Epistemology = Interpretivism	Case Study
Qualitative Research Design	Combined Life History and Life Course
Theoretical Frameworks = New Wave of Literature; Bourdieu's Field Theory	Repeated Semi-Structured Interviews (6 per participant over 2 years)
Narrative Inquiry	Critical Incidents Approach
Reflexivity	

The research questions are:

- To what extent does perceived expertise fluctuate in the developmental journey of expert-like sports coaches?
- What are expert-like coaches' experiences of fluctuations in their perceived expertise?
- How do expert-like coaches learn and adapt in response to fluctuations, and what are some of the outcomes for coaching practice and coach development?
- What constitutes contextualised valuable learning in the perception of expert-like sports coaches?
- How might the ongoing learning and (re)development of expert-like coaches be better supported and facilitated?
- Are there common behaviours or qualities supporting the promotion of perceived expertise among expert-like coaches?

3.2 Methodology

3.21 Ontology

This study adopts an ontological orientation of constructionism, in that perceived reality and meaning making are assumed to be socially constructed by persons, as they shape their worldviews, and in so doing themselves (Berger & Luckmann, 1966). In relation to this study, the author would regard the life world²³ of the expert-like sports coach to be largely socially constructed. That is, perceptions (and self-perceptions) of the expert-like sports coach are regarded as principally socially constructed, because they are primarily derived from, and maintained through, social interactions (with athletes, coaches, and significant others) within their sub cultural field.

An implication of this is that reality is viewed as being in a dynamic ongoing process of (personal and social) revision and renegotiation (Bryman, 2008). From such a perspective Bryman (2008) indicates that knowledge may be considered unfixed, and open to interpretation (including the researcher's own constructions of reality). However, a caveat to this position is that the author would also concur with Searle's (1995) defence of realism whereby he claims that physical reality may be a necessary foundation for our understanding of the construction of social reality (in addition to the mental reality of perceptions, feelings and judgements). For example, the harsh reality of the low pay of the majority of sports coaches (below elite professional levels) is also likely to affect perceptions of expertise, in addition to social encounters.

Furthermore, Searle's (1995) notion of intentionality is also pertinent, in that mental facts may be deliberately directed at a particular focus or not, such that intentional mental facts commonly shared and agreed by many individuals can effectively become objective social facts. Thus, while a subjective ontological position is maintained, and it is assumed the lived developmental experiences of expert-like sports coaches will be largely socially constructed, an objective epistemological situation may also apply to a certain extent (with individuals' preferences and opinions being constrained by

²³ By life world I mean that personal perception of reality which we construct for ourselves out of the (changing and unpredictable) social context of our everyday life in which we learn (see for instance Jarvis, 2010; Trudel, Culver & Richard, 2016). In this case principally (but not entirely limited to) a vocationally situated sub cultural setting.

commonly recognised ways of knowing and being within the coaching domain). For instance, a coaching community of practice has been identified as a fundamental process through which coaches can learn and become via vocationally situated social interactions with colleagues (Culver & Trudel, 2006). However, if this shared interest group formulates a code of ethical practice for its members, then the parameters of coaches' behaviours may become somewhat bounded by such an artefact.

Thus, if ontology is a means of considering how different versions of the world may be construed (Lincoln & Guba, 1985), then one could claim that social constructionism is a good (albeit not perfect) fit for the positioning of the current study. However, the author by no means considers all knowledge to be socially constructed. As Hacking (2000) highlights while claims for universal constructionism would be inappropriate and unrealistic, local claims regarding something in particular being socially constructed can conceivably be made, in order to raise consciousness of socially situated lived experiences, and their potential meanings. From such a standpoint we may be able to apprehend a nuanced feel for, and sense of, the everyday realities that emerge from the complex social worlds that people (such as expert-like coaches) dwell in, and their affective reactions (Hacking, 2000).

As a closing justification for an ontological position of social constructionism for the context of this specific study, it would seem untenable to argue that anyone is born rather than becomes an expert-like sports coach. And this becoming, as well as the development or fluctuation of self-perceptions of expertise, will inevitably feature a great deal of social interaction, in what is a highly interpersonal domain. Therefore, as Wenger (1998) has argued is the case in relation to learning, it is asserted that perceptions of sports coaching expertise are fundamentally (though not necessarily absolutely) a social phenomenon²⁴.

²⁴ Social constructivism emphasises an individual's cognitive adaptations as a consequence of social interactions, while social constructionism is more concerned with how artefacts, or beliefs, are created and understood as a direct consequence of everyday social engagement with others (Ackermann, 2001; Andrews, 2012). Thus, while we will attend to the adaptation of expert-like coaches in this study, this is in the overarching context of their perceived expertise as being socially constructed self-knowledge and status, which may be considered as the principle artefact in question herein (albeit in a process of dynamic change, and ongoing becoming, in adjusting to shifting conditions).

3.22 Epistemology

Interpretivism is the epistemological position for this study, since it requires the researcher to grasp and interpret the subjective meanings of social phenomena (here the lived experiences encountered in a particular work setting) (Bryman, 2008). This position emphasises the ability of expert-like coaches to construct meaning from their life worlds and experiences, and that this version of truth can be captured interactively, and is thus not value free, and may be subject to alteration in the interpretation process (Walsham, 1995). This perspective is strongly aligned with qualitative methodologies, since it seeks to gather data about lived experiences from those experiencing them (and necessitates reflexivity given the extra layer of interpretation). Moreover, it is assumed that by examining individuals in relation to their specific social context, there is greater scope to appreciate the perceptions they have of situated experiences (Hussey & Hussey, 1997). Such an approach may be useful in capturing alternate versions of the experienced realities of expert-like sports coaches, and in constructing representative local stories of their developmental journeys, which has received scant attention in literature thus far. Once again reflexivity is implicated here in regard to interrogating the researcher's truth claims in these respects (Watt, 2007).

3.23 Qualitative Research Design and Theoretical Frameworks

Fehring and Bessant (2009) indicated a qualitative interpretative research design can be useful in eliciting rich data that can promote an enhanced appreciation of the *how*, and *why*, of peoples' dynamic experiences of ongoing working lives. For example, how coaches experience, and cope with, fluctuations in their developmental journeys, and why these occur. This approach will be employed to potentially illuminate the perceptions, interpretations, and feelings of participants in respect of fluctuations in coaching development journeys and expert-like status.

Hence, we may obtain enhanced understanding of experiential and contextual factors influencing lived realities (Jones & Gratton, 2004). Moreover, emergent qualities inherent in this approach (Patton, 2002), are considered compatible with exploratory studies in areas where little is firmly established (Stearn, 1998), such as this one, which will uniquely explore fluctuations in self-perceptions of expertise in the long term developmental journeys of coaches. Nonetheless, ideas from Bourdieu's field theory, and theoretical reconceptualisations from what might be described as a new wave of

work in regard to expertise, expertise development, sports coaching, coach development, and adult learning (all emphasising a more complex, holistic, contingent perspective – see Table 8) will act as a guiding framework for the interpretation of results regarding how coaches’ experience, and respond to, fluctuations in their developmental journeys.

Table 8. Shifts of Emphasis and Example of Sources and Conceptions from New Wave of Literature.

Shift in Emphasis	Examples of New Wave Literature	Associated Conceptions or Theories
Product → Process	<p>Nunn (2008). <i>A network model of expertise.</i></p> <p>Colley et al. (2003). <i>Learning as becoming in vocational education and training: Class, gender, and the role of vocational habitus.</i></p> <p>Turner et al. (2012). <i>The journey is the destination: Reconsidering the expert sports coach.</i></p>	<p>Expertise as a constant becoming, never fully mastered.</p> <p>Learning as a process of becoming. Vocational cultures transform entrants via vocational habitus, which orients them as to how to learn, be, and feel, in that context.</p> <p>Sports coaching expertise necessitates a fluid and cyclical redevelopment in response to ever changing circumstances.</p>
Linear → Non-linear	<p>Grenier & Kehrhahn (2008). <i>Toward an integrated model of expertise redevelopment and its implications for Human Resource Development.</i></p> <p>Crespo (2009). <i>Tennis coaching in the era of dynamic systems.</i></p>	<p>Model of Expertise</p> <p>Redevelopment, which is cyclical and recursive rather than staged and linear.</p> <p>Chaos Theory – also known as non-linear dynamics, or dynamical systems theory. Proposes that open systems are in constant fluctuating interaction with the</p>

		environment (Mack et al., 2000).
Reductionist → Holistic	<p>Potrac, Brewer, Jones, Armour & Hoff (2000) <i>Towards an holistic understanding of the coaching process.</i></p> <p>Jones & Turner (2006) <i>Teaching coaches to coach holistically: Can Problem-Based Learning (PBL) help?</i></p>	<p>The coach as an intellectual involved in complex sociologically contextualised interactions, rather than merely a mechanistic bio-scientific technician.</p> <p>Coaching as a challenging complex social process, subject to diverse interrelating variables.</p>
Straightforward → Complex	<p>Bowes & Jones (2006). <i>Working at the edge of chaos: Understanding coaching as a complex, interpersonal system.</i></p> <p>Taber et al. (2008). <i>“Grey” areas and “organised chaos” in emergency response.</i></p>	<p>Coaches’ agency and creativity in working in a dynamic complex adaptive system. The self-concept as therefore contingent, temporary, non-linear and dynamic (e.g., Markus & Kunda, 1986; Knayazeva, 2001).</p> <p>Situated learning in communities of practice is insufficient to explain rapidly emergent, creative, autonomous actions required in crisis situations. Learning as Dwelling (Plumb, 2008) - are times when humans learn directly from encounters with the world.</p>
Universal truths → Contextual contingency	<p>Orland-Barak & Yinon (2005). <i>Sometimes a novice and sometimes an expert: Mentors’ professional expertise as revealed through their stories of critical incidents.</i></p>	<p>More recursive, discontinuous, interactionist conception of expertise acquisition. Accounts for possible regression if new roles are adopted. Expertise is relative to the context encountered.</p>

	Kilgore (2004). <i>Towards a postmodern pedagogy.</i>	Rejects a stable learning self, and recognises multiple selves constantly in flux, with learning contingent on entangled influences. The learner as emergent (Rosenau, 1992). Domain and learner always considered to be changing. Small, localised, differentiated interpretations.
Rational → Emotionally laden	Benner et al. (2009). <i>Expertise in nursing practice: Caring, clinical judgement and ethics.</i> Potrac & Jones (2009). <i>Power, conflict, and cooperation: Toward a micropolitics of coaching.</i>	Deweyan embodied construction perspective on learning – as an interrelationship of the cognitive, physical, emotional, and practical, in continuous interaction with the environment (Dewey, 1938). Dreyfus (2001, cited in Nunn, 2008) claimed only emotional, deeply involved, and embodied persons can become experts. Coaches' emotional responses to micropolitical demands of their situation can be important in meaning-making and sense-making.

3.24 Narrative Inquiry Research Approach

In addition to a social constructionist approach this study will also use narrative inquiry to investigate and understand peoples' lived experiences, and the way that they create meaning and identity from them, through the recounting of stories (Bruner, 1990; Clandinin & Huber, 2010). This methodology is founded upon the notion that we all live storied lives (Bruner, 1986), and inhabit a world that is shaped and represented through narrative ways of knowing (McCarthy, 2007), in which competing narratives account for alternative versions of reality (Dawson & Buchanan, 2005). This is hence

an interpersonal qualitative methodology involving knowledge generation and transfer via the collecting, (re)telling, analysing and (re)interpreting of stories (Etherington, 2004; Leavy, 2009).

Here the task of the researcher is to create opportunities for participants to tell their tales, and to facilitate that telling, with a focus upon illuminating the particular research area. This will involve identifying and (re)interpreting themes that emerge during the study, and imaginatively crafting co-constructed stories to be narrated²⁵. McCarthy (2007) uses a metaphor of spinning and weaving stories to represent the artistic process of forming the rich fabric or tapestry of the tale to be told. Such an approach may allow the investigator to move beyond ground covered by a more traditionally scientific research approach (Rolling, 2010), and allow a more complex, nuanced, and seemingly authentic form of presented findings. For example, Bowes and Jones (2006) claimed that stories about sports coaching may be productive in helping practitioners to obtain a grasp of the messy reality of coaching, presenting a holistic connected representation of experience, which may be readily accessible and inherently appealing to practitioners (Douglas & Carless, 2008).

Nonetheless, it is important to note that the research outputs from narrative inquiry embody what individuals perceive to have happened, rather than necessarily what actually happened; that is, a particular view of the phenomenon under investigation, from a personal experiential standpoint (Connelly & Clandinin, 2006). Furthermore, stories are gathered and (trans)formed within the framework of an evolving researcher-participant collaboration over time, which is in turn a relationship situated in its own influencing social context (Clandinin & Connelly, 2000; Clandinin & Huber, 2010). Additionally, our stories are constantly being constructed and revised on the hoof (Carr, 1986), so that we must attend to potential changes over time within the research process. In a recent interview Professor Jean Clandinin (O'Donoghue, 2012) reminded us that narrative inquiry is relational research, involving working *with* participants not merely doing *to* them. Nevertheless, while resultant stories may be co-

²⁵ As Bathmaker (2010) points out narratives may be considered as collaborative constructions, that is, in this case between each participant and the researcher. While participants agreed the produced narratives as being generally representative of their experiences and developmental journeys, they are inevitably their own recounted stories, but told through the perspective and voice of the researcher as a narrator, and in the overarching context/process of the study's focus.

constructed, and partial, they can remain insightful (Douglas & Carless, 2008) and even transformative (Gergen & Gergen, 2006), and in this regard narrative inquiry has been deemed useful for the study of underrepresented groups (Creswell, 2007). To remind the reader, stories of the long term developmental journey of expert-like sports coaches are not well represented in literature thus far.

Smith (2007) cautions that narrative inquiry is an umbrella term, with different meanings for different people, so we need to be clear about our positioning in regard to this study. For instance, taking Smith's (2007) conception of a continuum of different ways of conducting narrative inquiry, I feel a greater affinity with a more *playful* engagement with ideas and narratives, than I do with more *formulaic* ways employing standardised procedures and prescriptive means of analysis. Since I do not believe stories are formed or used in straightforward mechanistic ways, I do not seek to treat the construction or study of them in such a way. This of course brings an extra challenge in terms of justifying how findings were arrived at, or their veracity, but I will attempt to address this later.

For now, two last points pertaining to narrative inquiry. Smith (2007) observes that we are coming to consider narratives as embodied, and speculates on a connection with Bourdieu's (1990) notion of habitus, in that individuals might encompass an embodied narrative habitus, predisposing us to certain types of story, while retaining the capacity for agentic revision. This links to Colley et al.'s (2003) proposal of a vocational habitus, which, in light of the above, could help to explain how some people from common backgrounds or experiences may story themselves into certain occupational patterns. Finally, when Professor Clandinin was asked what advice she would give to those considering undertaking narrative inquiry research for the first time, she replied that we need to start by examining our own storied selves as researchers; what our story is, and how it led us to this point (O'Donoghue, 2012). Implicating that we may not hear and appreciate the stories of others if we are not able to hear and appreciate our own.

3.25 What is Reflexivity, and Why Use It?

In both sports coaching and education the requirement to reflect upon one's own professional practice is widely accepted as being crucial for ongoing growth and self-

development (e.g., Knowles, Borrie & Telfer, 2005; Moon, 2004), founded upon the seminal works of such influential writers as Schön (e.g., 1983) and Dewey (e.g., 1964). However, being reflexive encompasses something distinct from, and beyond the scope of, reflection alone. Reflexion²⁶ involves a significant element of critical introspection, a profound examination within oneself, and a kind of meta-reflection (a reflection upon reflection) (Riach, 2009). To draw upon Moss and Barnes' (2008) helpful description, to not merely notice what we noticed, but also to notice how and why we noticed it.

There are so many different forms of reflexivity alluded to in literature that Lynch (2000) suggested the term reflexivities might be more appropriate, to encompass a range of meanings and uses. But a commonality is that reflexivity usually features the questioning of our own and others' assumptions and presuppositions (Cunliffe, 2004). For instance, in the context of undertaking research, we might be mindful of how we may influence our own research efforts, findings, and knowledge production. Similarly, we may want to consider external forces that could shape our research, and what issues might affect our researcher-participant interactions. Two helpful quotes that I value as a guide to the purposes of reflexivity follow. To be reflexive is to: "...question not only ourselves and our position to the world, but the world itself and what we know about it." (Riach, 2009, pp.358-359). It might be useful in promoting: "...a much greater social self-awareness/consciousness of the whole intellectual/research process." (Plummer, 2001, p.208).

Hence, reflexivity has come to be regarded as a trademark characteristic of good qualitative research practice (e.g., Sandelowski & Barroso, 2002). Not least because when we reflexively bring to light such matters, we inevitably tend to modify them, and hopefully ameliorate their influences, promoting our own awareness and personal growth. However, some authors (e.g., Bishop & Shepherd, 2011) have cautioned that simply adopting a reflexive approach does not help us to fully appreciate (or negate) the exact effect we might have on others (such as participants), and, ultimately, we cannot escape the inevitable assumptions and reconstructed memories that we and

²⁶ Reflexive accounts are sometimes referred to as reflexion (see Riach, 2009), which remains distinct from reflection (see Appendix C).

others may bring to research, such that truth can never be entirely apprehended (Kvale, 1996). Therefore, as Pillow (2010) advises, we should at once be vigilant about our reflexive practices, but concomitantly pragmatic in acknowledging their limitations.

Riach (2009) affirms that we can perhaps gain merely a partial view of ourselves and others, and in a similar vein Plummer (2001) indicates that reflexivity can only scrape the surface. Nevertheless, even though it is not a cure-all, reflexivity appears to remain of crucial importance in regard to ethical research practice, as emphasised by Bishop and Shepherd (2011, p.8): “Reflexivity is a necessity, helping us to better understand the co-created, situated nature of research findings.” This resonates with this study which seeks to develop co-constructed stories of the lived experience of expert-like coaches, from a nuanced insider perspective, and cultivated over a longitudinal (and thus evolving) researcher-participant relationship.

Over such an extended period of research reflexivity will be required to be as upfront as possible about not only our potential assumptions and influences, but also our (alluding to both the researcher and participants) associated adaptation over time, and questioning of initial interpretations against multiple possible meanings (Alvesson, 2003). That is, critical reflexion upon the subjectivities of participants’ developing perceived understandings of their realities, and the researcher’s reactions and emergent understandings, are deemed essential (Qu & Dumay, 2011). Thus, Etherington (2004) has described the process of becoming a reflexive researcher as one of constant change and striving, without a realisable end point (see also Glesne & Peshkin, 1992). That is, it is essentially unattainable, but remains worthy of constant pursuit to provoke a greater depth of learning. Here there is a parallel with my own recent theoretical work, on reconsiderations of what an expert coach might be conceived as, and including the assertion that the expert coach is never the finished article, partly titled ‘The journey *is* the destination’ (Turner et al., 2012). Clearly reflexivity, as per expertise, is neither straightforward nor unproblematic.

Pillow (2010) recommends that we should recognise and employ critical reflexivities of discomfort to more realistically engage with the messy complexities of attempting to produce better qualitative research. She highlights how fragmented, changing, enigmatic selves (including that of the researcher, as well as participants), and

personal struggles for self-determination and self-representation, make reflexivity no easy thing, and indeed may involve a painful confrontation with our own and others' shortcomings (Pillow, 2010). Hence, Pillow (2010) advises that it is incumbent upon researchers to not only strive to ultimately produce knowledge for understanding, but also to aspire to be as transparent as possible about how and why the knowledge was produced.

Nevertheless, despite its difficulties, it is thought that the use of reflexivity can induce a form of transformative journey (Shaw, 2013), involving powerful learning via the internal reframing of experiences and perspectives, and it may enable a means of effectively tapping in to the lived experience of undertaking research, as well as promoting being more fully present in the research process, and the intersubjective relationships engaged therein (Etherington, 2004). Thus, as Finlay and Gough (2003a) assert, subjectivity could be rehabilitated from an apparent problem (i.e., a contamination of objectivity; a straying from the maintenance of researcher distance) into a perceived opportunity to strengthen the trustworthiness and integrity of situated qualitative accounts. Not least because we become more aware of being aware in the research process (Finlay & Gough, 2003b), which empowers us to think again critically about our influences, practices, and products. Etherington (2004, p.31-32) expresses this well:

“I understand researcher reflexivity as the capacity of the researcher to acknowledge how their own experiences and contexts (which may be fluid and changing) inform the process and outcomes of inquiry. If we can be aware of how our own thoughts, feelings, culture, environment and social and personal history inform us as we dialogue with participants, transcribe their conversations with us and write our representations of the work, then perhaps we can come close to the rigour that is required of good qualitative research.”

We now turn more directly to the methods employed in this study, as opposed to methodologies. That is, the research tools used and specific steps taken to complete the study, rather than the theoretical justification behind decisions about the overarching research approach (Clough & Nutbrown, 2012).

3.3 Methods

3.31 Rationale for Reflexivity and How it Will be Employed in this Study

As Nadin and Cassell (2006) infer a crucial prerequisite for any reflexive research strategy is a commitment to raise one's own awareness, and question one's own assumptions, rather than remaining complacent. Given that the researcher is often considered the main research tool in qualitative research (e.g., Stake, 1995), this is the crucial starting point from which the author is positioned, and to which he pledges, to promote a genuine engagement with reflexivity. However, there is a need to be reflexive in more detail and depth about our own position on reflexivity, given that reflexivity itself can mean different things to different people, and how it is employed will determine the kind of outcomes achieved (Lynch, 2000). Watt (2007) asserts that, ultimately, every qualitative study is distinctive, and the researcher must evaluate how to progress, and learn best from their experiences in the particular context. Thus, researchers should consider what reflexivity means to them, and how it might be best utilised in the specific context of their study.

Furthermore, there are concerns about the extent to which researchers can really come to comprehend the world views of others, or truly represent participants' lived experiences (e.g., Shacklock & Thorp, 2005; Stark & Torrance, 2005). In the face of this Riach (2009) recommends that we explore means by which we might situate participant focused reflexivity to a greater extent in the research process, in order to find ways to open up reflexive spaces for the participant voice to be actively expressed. This seems an ethically efficacious approach which acknowledges and values the participant perspective (Riach, 2009). Given the interpersonal element of this qualitative study, and the co-constructed nature of the storied outcomes, it is intended that reflexivity be intertwined throughout the research process in a number of ways (detailed below), and in relation to both the researcher and participants.

- An extensive reflexive diary maintained by the researcher. For instance, to stimulate the formulation of conceptual links or resonances, theoretical reconsiderations, and methodological adaptations related to this study. Authors have recommended this as a valuable tool (e.g., Bourdieu & Wacquant, 1992; Riach, 2009), since it represents an opportunity for ongoing self-dialogue, and the provoking of

introspective insights which inform decision making within the research process (Nadin & Cassell, 2006)²⁷.

- Participants will be requested to produce written life histories (looking backwards in time initially, and forwards in time at the conclusion). A guiding framework of reflexive questions, and exemplar life histories from the researcher, will be provided for the production of these narratives relating to their long term developmental journeys as coaches²⁸.
- A brief reflexive diary maintained by participants, in a form of their own preference, between interviews, to note critical issues related to their own coach development or self-perceptions of expertise, which may be explored at the following interview.²⁹
- A timeline trajectory of perceived expertise exercise to be completed by participants, to encourage them to consider the ups and downs of their long term developmental journeys, and to represent these graphically. Duarte (2013) similarly employed a Rappaport Timeline to stimulate participant reflection and awareness, and to promote holistic conceptions of expertise; although I was unaware of this when I originally came up with the idea.
- Note taking at interviews, as well as displaying research reflections/reflexions beside transcribed interview data (Wengraf, 2001), to both think through the data, and share thoughts/observations with participants.
- Member checking or respondent validation (Torrance, 2012), with participants reading interview transcripts, and resultant write ups, to assess the accuracy of representations or interpretations, and to suggest amendments.

²⁷ See Appendix B for highlighted examples from my reflexive diary.

²⁸ Please note that the initial coaching life history and timeline trajectory of perceived expertise guiding exemplars produced by the researcher/author are featured in the Reflexive Interludes.

²⁹ In order to facilitate this process participants were initially given guidance on the difference between reflection and reflexion, which included a sports coaching specific example from my own experience (see Appendix C).

- An active reflexive role will be encouraged by inviting participants to raise matters themselves to be addressed in, or during, the interviews. This is intended to facilitate a more detailed consideration of 'sticky moments' (Riach, 2009), where critical incidents of participant reflexivity on the research process itself may occur.
- The recursive nature of the repeated interview design, whereby issues can be revisited, or reconsidered, at subsequent encounters.
- The sharing of nascent theoretical thoughts, and early storyboard constructions, at later interviews in the research process with participants, to gain feedback, impressions, and observations.
- Peer debriefing (Lincoln & Guba, 1985) (critically discussing data analysis issues with colleagues or supervisors).
- The production of Reflexive Interludes, to be read between the thesis chapters, in order to attempt to better interweave the self into the work. One way of exploring the self is through autoethnography, which Ellis and Bochner (2000, p. 739) define as: "An autobiographical genre of writing and research that displays multiple layers of consciousness, connecting the personal to the cultural." It may be considered as a form of narrative inquiry, drawing upon the power of story, and promoting understanding through the portrayal and sharing of lived experiences (Ellis, 2004; Ellis & Bochner, 2000), related to a particular cultural setting such as sports coaching (Purdy, Potrac & Jones, 2008). Although, autoethnography shares some common criticisms of reflexivity in that it has been regarded as potentially narcissistic, self-indulgent, and merely navel gazing (Plummer, 2001), it seems to offer a legitimate means of shining a light on the relation of the self to the research, and partially answers Etherington's (2004) call for a consideration of how the researcher's own life history led them to an interest in the topic. The content of the Reflexive Interludes is autoethnographic in nature.

3.32 Case Study

Although I am using a particular kind of case study approach in this investigation (drawing upon the longitudinal cases of four expert-like sports coaches), it is as part

of a multifaceted qualitative research approach, rather than being a case study per se. Nevertheless, there are several strengths of the case study approach (Flyvbjerg, 2011), well-matched with the study aims.

Firstly, it provides a wealth of detail, offering 'completeness' in regard to the portrayal of participants' realities, but also opens a nuanced window on within-case variance (Flyvbjerg, 2011) (such as differential fluctuations in the developmental journey of expert-like coaches). Secondly, it can promote understanding of the relational complexity of context and process, and, thus, causes and outcomes (Flyvbjerg, 2011) (i.e., we may learn what triggers fluctuations, how they manifest, and implications for status and development). Thirdly, they emphasise developmental factors, linking significant events together to provide a holistic evolving picture over time (Flyvbjerg, 2011) (useful for gaining a long-term overview of developmental journeys, and trajectories of expertise). Kuhn (1987), cited in Flyvbjerg (2006), observed that good case studies are requisite as exemplars in any effective discipline, and here they hold promise to provide richly detailed examples of the lived experiences of expert-like coaches, to better grasp and potentially draw upon perceived realities. Furthermore, Stake (1995) indicates case studies are capable of portraying multiple perspectives and realities.

The foremost criticism of case studies is that findings are not generalisable to broader populations, and universal theories (Stark & Torrance, 2005; Thomas, 2011). However, Thomas (2010; 2011) argues case study offers something different - legitimacy because of exemplary knowledge uncovered. He asserts induction, where general conclusions are drawn from particular circumstances, should be superseded by abduction (whereby looser explanatory ideas are formed from the examination of local circumstances), as a means to infer from case study data, he states: "Abduction... [provides] heuristics — ways of analyzing complexity that may not provide watertight guarantees of success in providing for explanation or predication but are unpretentious in their assumptions of fallibility and provisionality." (Thomas, 2010, p.577). This reflects a growing recognition that unpredictability is pervasive in social worlds

(MacIntyre, 1985), and, thus, full transfer of findings to other social settings is questionable³⁰.

Of resonance with this study on applied expertise, is Thomas' (2010; 2011) and Flyvbjerg's (2001; 2011) adoption of the notion of phronesis (practical wisdom) in relation to case study, which encompasses applied (often tacit) working knowledge, craft skills, and experience based judgement. Thus, rather than offering all-embracing laws, organising theoretical frameworks, and consistent predictability, phronesis recognises the need for provisionality, variability, and plasticity – since changing circumstances will change the rules of engagement (Fish, 1989). Phronesis manifests in the practitioner's ability to recognise the right thing to do in particular circumstances (Thomas, 2001), in parallel with Swanson and Holton's (2001) observation that expertise could be conceptualised as the ability to do consistently the right thing in the right way. Thus, one may conceive of expert-like coaches as reflective practitioners (Schön, 1983), artfully applying and adapting phronesis, in response to shifting personal, contextual, and cultural demands. So, case studies may be suitable in providing rich in-depth understanding of complex in situ processes, rather than broad coverage via generalisation (Stark & Torrance, 2005).

Hence, a move away from generalisation and theory towards exemplary knowledge, via abduction and phronesis is recommended by Thomas (2010; 2011). That is, example not conceived as generally representative, typical or a guiding model, but a representation of a particular case in the defining context of another's experience, that may be interpreted in relation to our own, in order to illuminate particular problems, or improve understanding (Thomas, 2010). In this sense, the strength of case study is its capacity to provide a link between the accumulated wisdom of another and our own, through appreciation of the connection to our own phronesis. Thus, it may be appropriate and powerful to learn from particular examples, through what Abbott (1992) describes as the development of stories of accumulated occurrences, to which readers may be able to connect personally. Therefore, case study may develop a storied understanding of others' realities, which may be accessible and comprehensible in relation to our own (Thomas, 2010). From this perspective

³⁰ I develop further upon the use of abductive reasoning in the current study at the end of this section.

generalisation is only feasible if the framing context is fully appreciated, and relevance to our own context is apprehended (Thomas, 2011).

Stake (1995, p.85) described naturalistic generalisations as: "...conclusions arrived at through personal engagement in life's affairs, or by vicarious experience so well constructed that the person feels as if it happened to themselves." That is, readers may identify with facets of their own experience, and take from stories of others personally meaningful messages (Stark & Torrance, 2005). In this way data may be illustrative or inspirational, rather than generalisable (Alvesson, 2003). Drawing on Bruner's (1991) work on narrative, Thomas (2010) provides recommendations for story making from a phronesis and abduction based case study approach (including employing thick description in not only considering participants' actions, but also their thoughts and feelings, in weaving together how interrelated events promote change over time)³¹.

A final point to emphasise regards case study is that the researcher in co-constructing storied accounts inevitably brings their own phronesis to the process. However, while this challenges trustworthiness, it may also be beneficial, in that the researcher may more readily connect with and comprehend intimately the world examined, and empathise with participants' experiences from an insider perspective. The researcher for this study could be considered an expert-like performance coach, and could be a participant in other circumstances. Douglas and Carless (2015, p.4) highlighted that: "...the unique possibilities of 'insider status' when combined with narrative life story approach, can contribute a more complete understanding of the lives ...of sportspeople." For example, since the insider may seem more familiar to participants, trust and openness might be more readily promoted, such that a secure reciprocal rapport and a comfortable space in which to share stories could be established, consistent with potentially achieving a privileged and deeper comprehension of the life experiences of another (Douglas & Carless, 2015). Moreover, Douglas and Carless (2015) proceed to explain how sometimes insider experiences can conflict with what

³¹ One of the purposes of the coaching life history narratives to be produced is to represent the accumulation of practical wisdom (or phronesis) of practitioners as a feature of their journey towards expertise. Since such knowledge is complex, intangible and tacit, abduction is required to provide loose explanatory inferences about local circumstances that might also connect readily with the experiences of others, and plausibly inform broader understandings.

is supposedly known theoretically, and, thus, insiders can draw upon their own grounded experiences in critically evaluating emergent concepts and themes, and in contextually situating findings. Nonetheless, some authors dispute whether researchers can ever truly represent the other (Stark & Torrance, 2005), and it seems unavoidable that the storyteller will bring something of themselves to the storytelling (although we can at least be cognisant of this).

Stake (2005) asserts deciding to undertake case study is largely a choice of what/who to study rather than which method to employ. Regarding boundary selection of cases, it is intended to obtain a purposive sample (Polkinghorne, 2005) of case studies of expert-like performance³² coaches, using a range of positivistic criteria already traditionally employed in coaching expertise literature (see Table 9), but, also using willingness to participate in the study as a crucial indicator of suitability. Ensuring participants match the former criteria would identify them as expert-like, for those adhering to dominant linear views of expertise development; while the latter criterion relates to more recent conceptualisations of the expert as not the finished article, characterised by a never-ending thirst for learning (Nunn, 2008), and an active interest in their ongoing development (Schempp & McCullick, 2010).³³

Table 9. Criteria Traditionally Employed for Participants in Sports Coaching Related Expertise Papers.

Criteria	Explanatory and critical notes	Examples of papers in which this criteria was used
A minimum of ten years' experience of performance sports coaching	Relates to the ten year/ten thousand hour rule (Ericsson & Charness, 1994). That is, an extensive amount of accumulated practical experience is necessary for the development of expertise. Privileges the quantity over the quality of experiences.	Bloom, Durand-Bush, & Salmela, (1997) Nash & Sproule (2009; 2011) Vallée & Bloom (2005)

³² Performance coaching = coaching athletes who are preparing for competition, as opposed to merely participating for recreational enjoyment (Lyle, 2002).

³³ A difficulty of studies into expertise is access to experts, who are by definition busy and committed. Participants here merely need to be expert-like, and small numbers are required by the case study approach.

Coaching at a certain performance level – e.g., national team, national league, or district/county.	Relates to a ‘cream rises to the top’ view that assumes a meritocracy, and equality of opportunity in coaching.	Bloom et al. (1997) Jiménez, Lorenzo & Ibáñez (2009) Nash & Sproule (2009; 2011) Vallée & Bloom (2005)
Contributed to the development of national standard athletes.	Alludes to the effectiveness and added value of coaching, but assumes association with such athletes may be a principal cause in their success.	Nash & Sproule (2009; 2011) Bloom et al. (1997) Vallée & Bloom (2005)
Holds a high level coaching award (usually Level 4 or 5) from a national governing body of sport (NGB).	Indicates coaching ability and/or knowledge at a district/county or national level, although NGB awards tend to be competence based rather than necessarily related to expertise.	Nash & Sproule (2009; 2011) Jiménez et al. (2009)
Winning record as a coach – superior win percentage, or winning specific prestigious trophies/events.	May indicate superior coaching, but performance is notoriously multifaceted and contested (was coaching the cause?)	Bloom et al. (1997) Jiménez et al. (2009) Vallée & Bloom (2005)
Coach recommended by peers (e.g., NGB representative) as an expert.	Reflects commonly held perceptions within the specific sporting community, but is possibly an intuitive decision, founded on uncertain understandings of expertise.	Jiménez et al. (2009) Bloom et al. (1997) Vallée & Bloom (2005)

While prioritising rich depth rather than broad coverage, it is also intended to compare and contrast across the multiple case studies to some extent (Stark & Torrance, 2005). However, to be clear, I certainly do not intend to make grand all-embracing theoretical claims based on a few case studies, and instead I will draw upon Peirce’s ideas on abductive reasoning (see section 5.5 in Chapter 5) to suggest insights into the pursuitworthiness of plausible explanatory hypotheses, to potentially be tested and

developed later by others (McKaughan, 2008)³⁴. Data collection will be long term (two years of tri-annual interviews, with written narratives looking backwards and forwards in time), to allow for a greater possibility of patterns of change over an extended period of time.

3.33 Combined Life History and Life Course Method

Hodkinson and MacLeod (2010) stated life histories are also case studies, and according to Goodson and Sikes (2001) the life history method can supply a substantial depth of information, and a hearing for those not well represented (studies thus far have not provided in-depth long-term portrayals of the lived developmental experiences of expert-like coaches). Furthermore, Hodkinson (2005) reported the life history approach had recently been used productively in settings akin with the present investigation – i.e., workplace learning; adult education. Thus, familiarity with a participant's prior coaching story may help us appreciate aspects of their current coaching development in the life course.

Life history may be considered an extension of narrative inquiry, in that, while the former is concerned with the: "...production, interpretation and representation of storied accounts of lived experience." (Shacklock & Thorp, 2005, p.156), the latter additionally involves a socio-analytical dialogue with these life stories, so that life histories are co-constructed between participants and researcher (Shacklock & Thorp, 2005). It is the locating of a life story in its rich context by the researcher that is thought to add greater depth (Hatch & Wisniewski, 1995), and allow a potentially more complex account of the meaningfulness of experiences (Behar, 1990). Goodson (1992) indicates life history adds a further interpretative layer to a life story, which attempts to account for the contextual conditions of its construction and alteration. That is, as Shacklock and Thorp (2005, p.156) suggest: "Life histories allow the inquirer to introduce additional anchor points for understanding the subjective and the structural as mutual informants in understanding our own and other people's lives." The end

³⁴ I recently wrote a paper (Turner, 2017) explaining how Peirce's abductive reasoning had: "...great utility for me in inferring from the limited number of richly detailed coaching life history/life course cases [in this study] to suggest the plausibility of tentative explanatory ideas generated.", and, moreover: "Could extend beyond inferring from research findings, to additionally help make sense of the process that expert-like coaches themselves employ in order to adapt and evolve [in response to changing circumstances]."

product may be an entwined tale of the personal, cultural and contextual, anchored in the consideration of critical incidents in the life course. And so, we may be able to investigate significant fluctuations in learning, identity, and agency (and interrelationships between them), within a personally and culturally situated work setting.

Life histories hold promise in relation to this study, in that they offer the opportunity to represent messy, unpredictable and unexpected stories, featuring the multifaceted identities of participants (Tierney, 1999). For example, life histories might be constructed around events of significance in regard to coach development and perceptions of expertise, as opposed to being merely linear or chronological accounts. Moreover, dialogical activity and storytelling are emergent, in that they unfold and develop over time, and so are suited to longitudinal research designs. However, one criticism of life history is that it is usually retrospective only.

In contrast, life course research appears to present a dynamic view of life in process, and the complex ongoing interrelationships between individuals, and their historical, contextual and affective influences (Fehring & Bessant, 2009). Giele and Elder (1998) presented a four-part model of life course research, recommending key elements to be included in data collection: Location (historical and social context); Linked Lives (relationships); Human Agency (meaning and satisfaction); and Timing of Lives (event histories). Thus, life course research may potentially capture altering patterns of opportunity and circumstance, pertinent to this study.

Biesta, Hodkinson and Goodson (2005), and Hodkinson (2005), described a combination of life history and longitudinal interpretative life course methodologies employed in the education based '*Learning Lives*' research project. This synthesis was founded upon the notion that learning is thought to be inseparably related to being, action, and engagement in life's contextually and temporally related events and opportunities. Hence, participants were first encouraged to look back at their learning lives in a storied form, and were subsequently involved in six monthly follow up qualitative interviews, over three years (Biesta et al., 2005; Hodkinson 2005).

In regard to my study, the initial (or pre-narrative) phase, would essentially involve providing guidance to participants to attempt to elicit a response to the general question: “Tell me about your coaching life, and its development thus far.” The successive (repeated interview) phase (over two years) may provide a series of snapshots of the life course constituting a continuation of the life history, and tracking alterations in the lived developmental journeys of participants, in what Hodkinson (2005) calls the present-in-process, and Biesta et al. (2005) term the ongoing present. Here general questions such as – What is happening in the participant’s coaching life? How is their coach development varying or remaining stable? How do they perceive themselves and their current coaching status or identity? – are asked. It is important to recognise that this interview phase would interact with, plus follow on from, the initial life history narrative. An interesting addition to the data collection is a final ‘imagined’ alternative future narrative written by participants (a post-narrative phase), whereby ‘What ifs’ are explored in relation to possible alternative outcomes of past critical incidents, and pre-flections of actual possible future trajectories are envisaged.

All phases together offer a balanced blend of past, present, and future, and have the potential to interpenetrate, contextualise, and help illuminate plus interpret findings (Hodkinson, 2005). It is likely previous issues would need to be revisited, and current matters may trigger recollections³⁵. Moreover, we may delve beneath superficial understandings of developmental issues, and might raise self-awareness of related aspects not immediately apparent to those immersed in workplace action. Nonetheless, Hodkinson (2005) cautions that while these methods are similar, and may combine powerfully to produce rich data, using them together does entail some compromise to both.

Firstly, individuals unavoidably re-story the past (selectively, creatively, incompletely), in light of present conditions, and also experience the present through the filter of the past (Fehring & Bessant, 2009; Hodkinson, 2005). Prior experiences may restrict or enable engagement with present potentialities, while interpretations of the present

³⁵ Indeed, Hodkinson (2005) indicates that there are not always clear distinctions between life history and life course approaches, and one would certainly expect them to blend together in this study – although they seem to have separate research traditions and do not cite common literature beyond Thomas and Znaniecki’s (1918-20, cited in Goodson & Sikes, 2001, and in Mayer, 2009) work, which appears to be seminal to both.

affect telling of the past. Furthermore, life histories (and life course continuations) will inevitably be co-constructed with, and influenced by, the researcher, in respect of guidelines provided, questions posed, and interpretations made. Thus, while balance and interpenetration are positives offered by this combination of methodologies, the balance is critical, and some personal distortion is inescapable. So, for example, there is a need to weigh carefully, in planning interviews, attention to broad cross investigation themes, and individualised developmental issues from earlier life course interviews, and arising from the life history narrative, while also recognising the need to provide space for participants to address matters they themselves deem significant. Notwithstanding, this method mix seems to hold promise in regard to deepening understanding of the formative and ongoing (re)development of expert-like coaches, within the dynamic unfolding long term context of their professional lives. The end product should be a series of individualised developmental biographies (in the form of stories of individuals' coaching lives), which track the fluctuating course of coach development.

Nevertheless, Shacklock and Thorp (2005) claim life history research is potentially problematic and ill defined. For example, the authenticity of being able to provide a storied voice capable of accurately representing the lived experience of others is disputed, and involves the considerable difficulty of dealing effectively with slippery concepts such as identity, culture, and agency (Tierney, 2000). Gathering data requires the researcher to encourage others to recall and relate stories of experiences by means of narrative and dialogue. For example, life history and life course inquiry interviews are concerned with providing a space within which practice can be discussed, and ideas exchanged, in co-constructing a representative life story. Furthermore, the retrospective construction of life histories by participants is contingent upon the quality of remembered events (Shacklock & Thorp, 2005), and life course interviews may be compromised by attempts to render the tacit explicit.

While these concerns pose significant challenges to be taken into account, it is proposed that the combination of a life history and a long term interpretative qualitative life course approach may be useful in elucidating data informing a better understanding regards this study's research questions. Hodkinson and MacLeod (2010) asserted certain research methods have strong affinities with particular views

of learning. The author supports a view of learning in relation to expert-like coaches that conforms with metaphors of learning as becoming (Colley et al., 2003) and learning as dwelling (Plumb, 2008), since these seem well suited to the area investigated. For example, modern conceptualisations of coach learning fit well with the notion of embodied construction, through practical engagement in a complex learning culture (Cushion, 2011). Hodkinson and MacLeod (2010) state it is understandable that researchers should adopt methodologies compatible with both their own views of learning, and effectively addressing their research questions. Thus, case studies, employing a partly life history and partly life course approach, in co-constructing biographical stories of fluctuations in expert-like coaches' developmental journeys are deemed appropriate here.

Finally, although not the principal reason for methods outlined, there are indications from literature that participants may benefit from being involved in such a study. For instance, Goodson and Sikes (2001) indicated life histories and life stories have the potential to improve understandings of our own and others' lives. Similarly, Biesta, Goodson, Tedder and Adair (2008) asserted constructing and recounting one's life story may positively impact upon learning and life. It could even be possible that agency and identity (re)formation (what Goodson and Adair (2006) refer to as re-selfing) might be facilitated via explicit exploration of the process of change in response to confronting fluctuations in the coaching development journey. Moreover, this method may help produce accessible knowledge useful in informing (and connecting with) others, and potentially contributing to aspects of their own flourishing (Reason, 1996).

3.34 Semi Structured Interviews

Semi-structured interviews will be utilised, which are deemed compatible with a localist perspective (Alvesson, 2003; Qu & Dumay, 2011), in that they are thought to be particularly useful for exploring lived experiences, and associated meaning making of others, in socially (co)constructing situated accounts of particular perceived realities (Qu & Dumay, 2011). From this perspective, interviewees are not regarded as passive receptacles of objective truth, to be mined by the interviewer (Kvale, 1996). Rather, the localist recognises there is effectively no context free stable objective truth to be captured, paving the way for a more complex, dynamic and richer representation of

how individuals interpret and negotiate meaning in their life worlds (Qu & Dumay, 2011). Thus, the localist may see the interview itself as a complex experiential situation, through which local knowledge may be elicited and explored via discourse on specific topics within a social encounter (Qu & Dumay, 2011). In this intricate interpersonal interaction local negotiated meanings, which must be understood in their own context, supplant universal truths (Alvesson, 2003; Fontana & Frey, 2000).

Hence, in semi-structured interviews, the interviewer attempts to probe themes in the qualitative experience of respondents via a general structure, but maintains flexibility through open mindedness towards unanticipated findings or directions, rather than imposing predetermined frameworks, in a potentially insight inducing dyadic interplay (Kvale, 1996). This entails considerable demands on the researcher of carefully formulating questions based around guiding themes in a systematic manner, and artfully applying questioning, listening, probing, and interpreting (Qu & Dumay, 2011). It is crucial to the effective elicitation of perceptions to remain sensitive to leaving space for interviewees to respond in their own manner and pace, in appreciating their world views (Qu & Dumay, 2011).

Thus, Qu and Dumay (2011) indicate that while semi-structured interviews have the potential to provide situated accounts of the perceived realities of others, they are dependent on the quality of the interaction between the interview setting, respondent's perceptions, and researcher's capacities. In this respect, the researcher themselves becomes an integral research tool (Watt, 2007). For example, knowledge and familiarity with the research focus (Kvale, 1996) will be imperative in connecting with respondents' experiences; and an accomplished balance of openness, direction and judgement will be required in co-constructing situated accounts, and exploring the trustworthiness of perceptions reflexively (Qu & Dumay, 2011).

3.35 Critical Incidents

Borg and Gall (1989) describe the critical incident technique as a qualitative method to elicit detailed depictions of culturally situated stories regarding significant events which may be analysed. Individuals are typically requested to highlight and outline noteworthy events experienced in relation to their work (Spencer & Spencer, 1993),

which may be probed via interview techniques to attempt to provide depth of description, and enrich our understanding of pertinent events affecting subjects (Smith, 2008). Since Howitt (2004) indicates the influence of such events could be either positive or negative, it will be important to avoid the misdirection of participants to only negative incidents via a misinterpretation of the term critical. That is, positive critical incidents may be potent developmental catalysts too, that need to be recognised and explored.

According to Tripp (1993) critical incidents can indicate important decisive moments of change or turning points in individuals or the context operated within. In Klemash's (2010) collection of interviews with great coaches, one coach described defining moments that may propel you to greatness, or defeat you (akin to a bifurcation point from chaos theory). Hence, in relation to case studies, Stark and Torrance (2005) indicated it may be useful for participants to identify and reflect upon critical incidents in work settings, to facilitate the emergence of key issues.

Tripp (1993) employed critical incidents in investigating teaching, and asserted that through reflection and analysis these significant events may be made meaningful and incisive. Moreover, Orland-Barak and Yinon (2005) investigated critical incidents experienced by educational mentors, in unearthing evidence of fluctuations in expert performance. Furthermore, in reviewing expert coaches' career development, Nash and Sproule (2009) indicated that knowledge of how coaches deal with role transition experiences is lacking. Exploring critical incidents in the long term developmental journeys of expert-like coaches could be fruitful in this regard.

Fehring and Bessant (2009) discussed transitions (short term changes in status or role), and trajectories (longer term patterns of stability and change, often comprised of several transitions), and their utility in investigating patterns of how individuals navigate career paths through working lives, which in modernity largely do not conform to traditional linear models. They indicate life course research is established as efficacious in understanding lifelong learning trajectories, but is seldom applied to understanding work trajectories. However, life course approaches seem to usually involve extended longitudinal time-frames (Mayer, 2009), and in this study, it is

intended to adopt a partly life history and partly life course approach over a more realistically manageable (but long term) period, in exploring critical events and how expert-like coaches perceive these experiences. It is possible, therefore, that there might be more emphasis placed upon transitions than trajectories through a focus on critical incidents. But it is hoped one may gain a sense of the latter in capturing data regards the life history and life course of expert-like coaches in their developmental journeys over the two-year interview time frame (as well as from the aforementioned timeline of perceived expertise development to be produced for each participant, which will also indicate where and when critical developmental incidents occurred), supplemented by written retrospective and forward looking narratives (see Figure 7).

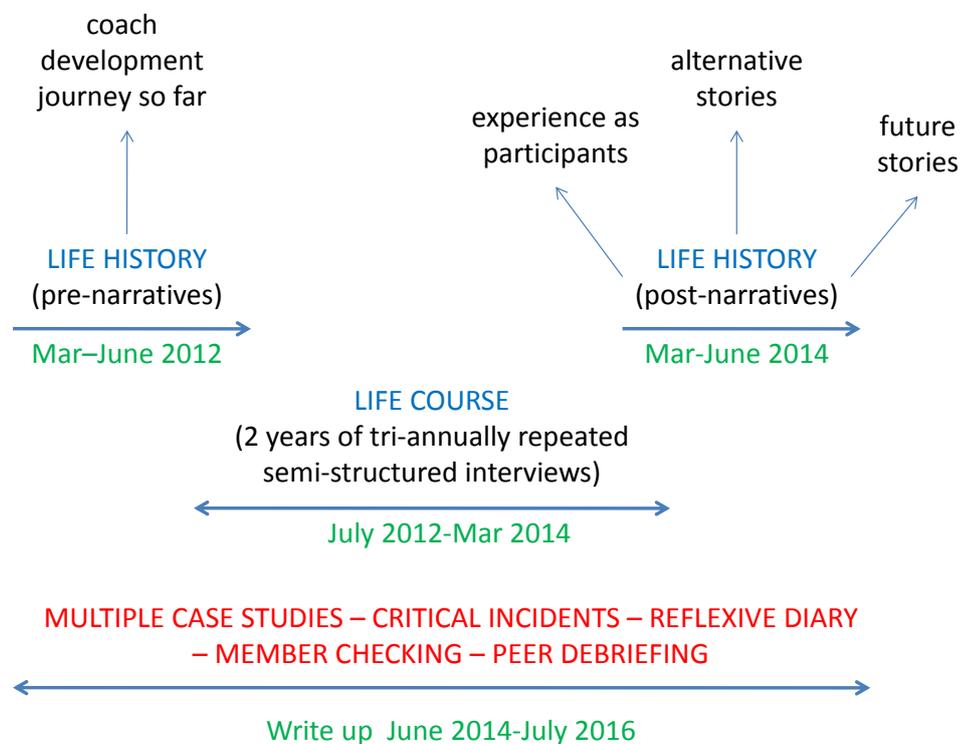


Figure 7. Summary Diagram of Research Methods, Design, and Timeline for Completion.

3.4 Participants

One of the most significant challenges in undertaking any expertise study is gaining and maintaining access to those considered to be experts (Abraham et al., 2006). As highly accomplished individuals in their field experts are by their very nature in demand, busy, and often overcommitted. Hence, I tried to ameliorate this by recruiting

expert-like coaches to a flexible long-term research design that is hopefully not too onerous as regards participation (once the life history is captured, it merely involves reflexive diary entries of once per month minimum, and hour long interviews thrice yearly at a time and place of convenience). Furthermore, although not the principle reason for undertaking it, this type of study (which represents a set of educational biographies set in the context of expert sports coaching) may well benefit participants' own development, in that by reflecting upon their learning journeys, they may better apprehend their knowledge, identities, and learning opportunities (Dominicé, 2000).

With these issues in mind I set about recruitment of a purposive sample (what Patton (1990) refers to as information rich cases for in-depth study) against a range of traditional criteria already employed to identify experts within established sports coaching literature (detailed in Table 9), along with identification with a more general requisite quality of a strong interest in their own ongoing coach learning and development (well established as a characteristic of experts – e.g., Schempp & McCullick, 2010). It should be noted that participants did not have to match fully all the traditional expert coach criteria, but merely needed to be broadly recognisable as expert-like, since for the purposes of the investigation they simply need to be more clearly towards the expert end of what has been conceived as a novice-expert developmental continuum (e.g., Chi, 2006). Additionally, by delimiting the study to performance sports coaching (i.e., where Lyle (2002) indicates there is an emphasis upon the preparation of athletes for competition), the identification of expert status was facilitated by the adoption of a tighter contextual focus.

I sought to recruit suitable participants by firstly exploiting professional contacts arising from my employment as a Higher Education sports coaching lecturer; and secondly, by utilising broader professional networking contacts to enlist advertising through suitable organisations (such as County Sports Partnerships and the Football Association League Managers' Association). Cooperation from the latter organisations was good, and resulted in four prospective participants coming forward. Meanwhile, existing personal contacts led to a further four individuals expressing an interest in being involved. Therefore, I firstly communicated with the eight potential participants via email and/or telephone to broadly gauge their suitability and interest. This was then progressed (if deemed appropriate by both) to arranging an initial face to face meeting,

at which the study was explained, demographic data and information related to the match of the person to the expert coach criteria was gathered, and informed consent to participate sought.

Seven such meetings, of around thirty minutes duration, were held, at a time and place of convenience to the potential participants (one person did not respond to communications after expressing initial interest). Consistent with recommendations from Goodson and Sikes (2001) I dressed in a manner that potentially put the interested parties at ease, and emphasised a shared interest and status, or an affinity (i.e., wearing a track suit, and trainers, consistent with a sports coaching role). The informed consent form (see Appendix D) seemed to work effectively, indicated partly by the fact that the first participant I met had already pre-completed the demographic data, and sections related to the expert coach criteria match, prior to the commencement of our meeting (the form having been forwarded beforehand).

Despite this apparent clarity, I certainly felt more comfortable having talked through face-to-face the participant commitments in becoming involved in the study. In particular I was able to explore whether the commitment seemed realistic given their coaching pressures, and to emphasise that I was more than happy for them to withdraw sooner rather than later if it was deemed necessary. Furthermore, in talking through and completing the section relating to expert coach criteria, the process proved to be far more complex than anticipated. That is, while the criteria selected were based on those traditionally employed in studies already undertaken on expert sports coaches, which may be considered rather mechanistic in nature, and quantitative in feel (such as number of years of experience), discussions during completion of the forms revealed an unforeseen qualitative element related to the criteria when considered against specific sporting contexts in which the coaches operated. This mirrors Cole and Knowles' (2001, p.22) assertion that: "Context is everything." could be an apt motto for life history research.

The importance of understanding context was reinforced several times. For example, the criteria that required the greatest clarification and discussion was *Winning record as a coach*, in respect of which the form requested that the participant considered their most significant winning achievements in their coaching careers thus far. This resulted

in rich detail, which engaged the coaches in reflecting upon their varied and impressive accomplishments, and seemed to facilitate our researcher-participant relationships. As an illustration, one potential participant elucidated that in the specific context of his sport, athletes that they worked with would be required to maintain around a sixty percent win record to maintain their status at the same level as the coach was operating at. Thus, insight into, and appreciation of, contextual demands was obtained.

In regard to *Coach recommended by peers as an expert*, I offered a range of possible responses, including attainment of prestigious coaching roles, nominations for coaching awards, and whether the coach believed that their NGB would recommend them as an expert. It soon became clear that one particular prestigious role these coaches tended to have gravitated towards was that of a coach educator (in various guises, such as a coach mentor, or head of the coach education programme). This was an interesting preliminary finding given that such a progression has not been highlighted in expert coach research so far. In relation to the NGB recommendation, I decided that rather than relying merely upon the participants opinion of whether they would be recommended as an expert I would also ask for the contact details of an NGB representative who might corroborate this opinion. Participants were happy to provide such a contact, and my follow up communications were unanimously and positively responded to by persons in suitable positions of responsibility within the respective organisations.

Please see below a summary of the demographic data, and the match against the expert coach criteria, for the four participants who subsequently took part in the study (Table 10), and who, overall, seem well suited to the scope and aims of the investigation.^{36 37}

³⁶ These are the actual names of the participants rather than pseudonyms. All decided to waive anonymity (although David chose to have his picture and other identifying features removed from later Results content), and were willing to share their stories openly as potential coach education resources.

³⁷ Unfortunately, women coaches are not represented in this sample, although this was purely incidental, perhaps reflecting the more general underrepresentation of women in sports coaching (Norman, 2008), particularly at elite levels (Norman, 2010). As noted in my reflexive diary I had really hoped to potentially recruit one very credible national standard female netball coach who had expressed an initial interest, but disappointingly she was eventually unable to commit. Although this underrepresentation was in no way intentional, it could conceivably be related to my own maleness

Table 10. Demographic Data and Match of Participants to Established Expert Coach Criteria.

Name	William	David	Malcolm	Sam
Age	46	48	61	27
Sport	Karate	Athletics (Endurance)	Athletics (Throws)	Tennis
Years of Performance Sports Coaching Experience	20	10	12	8-9
Performance Level Coached At	Currently Head National Coach. Regularly coaching internationally (European and World Championships).	Currently coaching at National through Regional, County, and Club levels. Coaching Under 20 age group international athletes.	Currently National Performance Director for one Caribbean and one SE Asian country. Coaching national standard athletes in UK.	Currently coaching at 1 of 3 International High Performance Centres, in an Academy setting. Regularly coaching at Regional and County Camps.
Number of National Standard Athletes Developed	20 total (10-12 from scratch to National Champion; 1 from scratch to European medallist; 2 from scratch to international level (Euro/World Championships).	8 (all ranked in top 50 for event nationally, which is pool national selection is taken from).	20+	50-60 (including 1 World Class athlete).
Highest Coaching Qualifications	World Federation Accredited Coach for this martial art (likely to be equivalent to L5).	L4 UK Athletics (held for 3 years).	L4 Strength and Conditioning L3 Athletics (cannot go higher until coach education structure is amended, but would like to do European L5 award).	L4 Lawn Tennis Association Club Coach Award (Performance) (held for 6 years).
Winning Record as a Coach	1 World Gold medallist. 2 World Bronze. 2 European Bronze. 20+ British	Athletes appear in national level event finals. Medal	2 Silver medal winners in World Championships. Most national titles	Players working with him are regularly maintaining 60% win record to remain

unwittingly influencing participant recruitment, and sadly reinforces further a lack of appropriate attention to the experiences and representation of women coaches in research.

	Champions. Various medallists at international open events.	winners at National and Regional level.	have been won by his athletes over the years. Multiple Gold medal winning athletes at National level. Coaching current World Champion in disability sport.	at same performance level. Coached National Schools Championship teams. Individuals coached have won Grade 1 competitive events.
Recommended by Peers as an Expert	Confirmed by NGB representative. Runner-up in local Coach of the Year award. Appointed National Coach.	Confirmed by NGB representative. Endurance Area Coach Mentor for England Athletics (part-time consultancy basis).	Confirmed by NGB representative. National Performance Director appointments.	Confirmed by NGB representative. County captaincy in coaching role (several times). U11 Academy Director (responsible for 130 players in an elite programme).

Prior to each initial meeting I forwarded the Informed Consent form, guidance notes on writing up the initial life history (see Appendix E - Guiding Questions for Writing 'My Coaching Development Journey So Far'), my own Coaching Development Journey So Far as an exemplar (see Reflexive Interludes), and another example from a football coach (who had given permission for it to be used) which was not written to these specific guidelines. Therefore, those who agreed to participate were able to quickly engage with the initial life history task, with an agreed timescale of completion of three to four weeks. While, overall, I found the initial meetings promising, several associated issues and feelings arose which were detailed within the reflexive diary I had started.

For various reasons some potential participants felt unable to commit to the study. This was for the most part because of the pressure of their work and coaching commitments. Expert coaches are notoriously overcommitted in my experience. So, the issue of lack of realistic access to the very busiest coaches provoked another layer of critical thought, in that these least accessible coaches may also be likely to be experiencing the most fluctuations in their perceptions of expertise, due to juggling considerable commitments under great pressure of work and intensity. Might the most suitable participants for the study also be the most inaccessible?

I found it interesting that reviewing those expert coach criteria with participants at the initial meeting proved to be far more complex than anticipated. While these criteria initially seem instrumental and straightforward, and are often utilised in studies which do not seem to conceptualise of coaching expertise as being dynamic or contingent (Turner et al., 2012), it soon became apparent that the detail needed to be clarified and critically considered in the light of contextual contingencies such as specific sporting performance structures. However, I had successfully recruited four participants who would be regarded as expert-like by most people, and perhaps more crucially as expressed on the informed consent form: ‘...have a thirst for learning, and an interest in your own ongoing coach development, that leads to a willingness to participate in a study which may well (although not the principal reason for undertaking it) benefit your learning.’

3.5 Data Collection

After I obtained ethical approval for the study, each participant produced the initial life history to the guidelines provided. I found the content to be rich, powerful and inspiring. It proved easy and enjoyable to add observations, interpretations and queries – fertile ground for question generation prior to the first interview. I forwarded my annotated version back to participants for them to see my observations and reactions – this was an unanticipated action, but felt intuitively right in terms of the broad framework of co-constructing the stories, and promoting dialogue. One participant commented that the written observations were interesting for him and stimulated thought about his coaching. Another stated how much he valued the freedom to write offered by the openness and flexibility of the guidance, and more than one alluded that writing the life history revealed things they were not fully aware of in terms of their own coaching development (such as the importance of influential people). All participants indicated they enjoyed writing the life history. It was pleasing to gain early indications of a strong approach of working together with participants as recommended by some authors as a key feature of life history research (e.g., Goodson & Sikes, 2001), and signs of participant benefit from taking part in such a study approach (as highlighted by Dominicé, 2000).

The life histories provided useful hooks for beginning to explore the lived experience of my expert-like coaches at the interviews, which typically lasted between an hour and ten minutes, and an hour and a half. I recorded the interviews simultaneously on two different recording devices to ensure the data was effectively captured. The interviews evoked useful and interesting data, but I had too many questions covering similar ground, and a breadth of consideration that sometimes resulted in much peripheral data. Nonetheless, I noted in my reflexive diary that some nuanced insights were being obtained, and on occasions tacit knowledge was revealed. For the most part participants seemed thoughtful and engaged, and the interview process was a pleasant and enjoyable one. All participants expressed they saw value in being part of the study, and seemed to be enjoying the process generally.

Participants were forwarded annotated transcripts, and agreed them as being generally representative of our discussions, or suggested amendments (although the length of these transcripts made this somewhat problematic). An iterative process, whereby issues were revisited or developed at subsequent interviews, was established, and a comfortable rhythm was promoted in the progression of the research. Participants took some time to fully apprehend the reflexion/reflection distinction, and adherence to completing reflexive diaries was patchy, but truly reflexive observations were occasionally forthcoming (and there were genuine signs of transformation in at least one participant as a result). I also introduced a reflexive task based on producing a timeline trajectory of perceived expertise (an example of my own timeline is included in the Reflexive Interlude supplementary document), which further fuelled dialogue, and consideration of critical incidents.

I continued to invite participants to ask their own questions, and raise their own issues, and I attempted to build in opportunities for them to respond flexibly or creatively. For example, one participant imaginatively adapted the timeline task to match his personal conception that perceived coaching expertise adjusts to a broadening of awareness of what the coaching role is, or might be, such that the scale against which judgement is made shifts also (this will be presented in Chapter 4).

I committed to transcribing each interview before the next (four month periods), and this proved a daunting task. However, it was not only achieved, but I also fully

annotated each transcript with observations and comments (thus, effectively starting data analysis, and summarising of findings). Interviews were transcribed verbatim, although I did not seek to record issues such as body language and tone of voice in detail, and did not gain much added value from note taking during the interviews (so this strategy was abandoned). Essentially, I am interested in broad representation of the participants' stories, which does not necessarily require consideration of such micro detail, and is perhaps better served by a reflexive iterative research design. Each transcript made up around fifteen thousand words/thirty pages. But this process started to fuel an appropriate individualisation of the subsequent interview questions, as well as retaining some common questions and structure. I successfully conducted the six planned interviews with all four participants (twenty-four overall) by February 2014. These were fully transcribed, and annotated by April 2014. The future facing life histories were subsequently gathered by May 2014.

Generally, the data collection process was a remarkably straightforward and enjoyable (though effortful) one. Data gathered seems interesting, informing, and relevant to the research questions. If anything a superabundance of data was obtained, and drawing it all together to elicit potential meanings presented a significant challenge. Notwithstanding, a considerable amount of research was completed, and a significant data resource was successfully obtained.

3.6 Data Analysis

As referred to above, I believe that my recorded annotations on the life histories and interviews represented the start of the data analysis process. The storing and organising of these files, which allowed key issues and themes to be readily accessed for further analysis, facilitated coherently drawing the data together in preparation for meaning making. In support of this Plummer (2001, p.149) asserts: "...in this very process of managing the data, a new 'story' might start to appear." It also provides an audit trail of work collected and completed. Hence, Cole and Knowles (2001) compare the life history researcher to an archivist, storing information in a way that enhances later retrieval and use. Plummer (2001, p.152) further advises that: "In doing life history research, a good filing system harbours your intellectual life." In a sense then the process of data collection and analysis proceeded simultaneously, and, indeed,

methodological and theoretical thoughts concurrently developed as a result, as advocated by Creswell (2007) and Merriam (1998).

The reflexive diary proved instrumental in this regard, consistent with Goodley's (1996) recommendation that a necessary challenge for the life history researcher is to reflect deeply upon their role in the collection of life histories. In particular the reflexive diary, as a research tool, stimulated creative thought. In fact, I have been pleasantly surprised how intuitive and creative the research process has been. This perhaps reflects Goodson and Sikes' (2001) observation that idiosyncratic individual interpretations of methodology are a defining feature of the life history approach, and Cole and Knowles' (2001) assertion that life history research requires imaginative and artistic qualities. Two examples from my study follow.

The timeline trajectory task was not envisaged prior to the start of data collection, and was inspired by similar representations of critical formative experiences that my students inventively produced in an assignment dealing with their own coach development journeys, as well as a desire to visually depict the life histories that participants had produced. Nonetheless, it proved a helpful means through which to graphically illustrate the relationship between perceived levels of expertise, and the passage of time, in the participants' coaching journey. Additionally, annotations were included to help explain evident turning points, regressions, plateaus, and trajectories. Goodson and Sikes (2001) advocated the potential use of timelines to focus attention and provoke recollections in relation to life history, as well as to alert the researcher to the nature of key formative experiences, or periods to be further explored. Cole and Knowles (2001) urged life history researchers to employ imagination in finding representative means, over and above the written form, that are able to embody the life history, and be responsive to drawing out participants' experience based understandings and perceptions.

Mindgenius[®] software was used to produce mindmaps for each participant, based on the annotations pertaining to their life histories and life course interviews. I refer to these as storyboards, and employed this versatile software to construct and visually depict the major themes, branches and interconnections in individual stories. I reviewed the appropriateness of these storyboards with participants, as they evolved,

during the later interviews. The process of revisiting and gathering together the data on individuals proved enlightening, and I included trigger images to represent key themes within the storyboards. In such ways I set about analysing and drawing together the data, and began to craft the stories.

It is disconcerting to note that life history literature presents no agreed procedures for undertaking data analysis, or writing up results (Cole & Knowles, 2001). In contrast, an intuitive process is implicated by Plummer (2001), whereby large amounts of data are revisited and reflected upon, and themes and issues start to emerge, as ideas coalesce and meanings surface that seem to make sense, or feel correct. Even when Plummer (2001, p.152) describes what he terms the standard technique it is gloriously imprecise: "...read and make notes, leave and ponder, re-read without notes, make new notes, match notes up, ponder, re-read and so on." He later portrays the process of analysing and writing up of life histories as thoroughly disorderly. However, this does not preclude us from having strategies, such as those detailed above, or from adopting guiding principles.

Thus, I generally sought to gain insight by immersing myself as much as possible in the data. I revisited and annotated both the life histories and the interview transcripts, in constructing and revising the storyboards. Concomitantly, I recorded and challenged my own developing thoughts through the reflexive diary, and sought creative means through which to apprehend the complexity of the lived experience of participants. I strove to understand the lived experience by engaging in open dialogue, inviting a co-construction of the stories to be recounted, and by becoming (in as far as possible) what Cole and Knowles (2001) describe as enmeshed in lives. Hence, I pursued a holistic appreciation of the participants' experiences, while recognising that I can never completely capture it (Cole & Knowles, 2001).

Cole and Knowles (2001) remind us that life history researchers often gather more information than it is possible to use, and I am cognisant that a great deal of data was indeed accumulated. However, in the later interviews I did experience an element of saturation (Mason, 2010); the same themes or issues were arising, or familiar ground was returned to. Henceforth, the later interviews became shorter (e.g., fifty minutes), and the emphasis shifted to sharing with participants the major themes that seemed

to be emerging in relation to their own stories, or my broader theorising about the nature of expertise, and to what extent this resonated with their lived experiences.

I am acutely aware of the heavy weight of responsibility in attempting to craft stories which honour the richness of the lives of the participants, and convey a sense of verisimilitude³⁸. In my understanding of how I may attempt to ensure this, it would be through encouraging participants to consider the trustworthiness of the data and representations produced via member checking, and by being as upfront and transparent as possible about my own strategies and thoughts during the research process via the interweaving of reflexivity (see section 3.31 for how this was done).

Polkinghorne (1995) distinguishes between *analysis of narrative* (whereby common themes or concepts are identified across stories, using them as a source of data to become familiar with the world of the teller), and *narrative analysis* (which views narratives as essentially making up the social reality of the tellers). Since I adhere to a constructionist ontology that aligns with worldviews being largely determined by the (re)telling of stories, I adhere more strongly to *narrative analysis*, which considers narratives as knowledge in themselves. In this method the analysis itself becomes the crafting of an engaging and convincing story, which is faithful to the complex and richly meaningful lived experience of practitioners. While such an approach does not usually aim to compare likenesses between stories, I will additionally look across the narratives within this study, to potentially inform abductive theorising (McKaughan, 2008; Thomas, 2010) about the nature of expertise development in the coaching domain. That is, to extrapolate from local observations (what is), to explore broader tentatively conceivable explanatory ideas (what might be), by analogy with things already known in other domains (Turner, 2017). “One could regard this as a generative reasoning process, based on observed data, alongside already known facts, as a crucial preliminary stage in the theory building logic of discovery.” (Turner, 2017). Although this is not the principal aim of this research, it would seem remiss not to consider the possible broader implications of the data, given that this investigation of local narratives was originally founded upon challenging a grand narrative (i.e., overly simplistic conceptions of what it means to be, and remain, expert).

³⁸ The appearance of truth or reality (that is, hopefully to the reader, the author, and the protagonist).

The participants' coaching life stories will be converted to narratives using Polkinghorne's (1988) distinction that a narrative may be considered as a story featuring a plot. That is, the stories will be structured and centred around particular concepts, and selected events, that provide contextual meaning for their relevance to the specific research questions of this study. While the main focus of this study will be on the forming of representations based upon multiple in-depth individual case studies, there will also be some element of looking across the stories, and speculation upon wider implications (Plummer, 2001)³⁹. However, in all of this the author wishes to leave space for the reader to make their own links. I do not strive to make firm objective claims about truth given the contingent nature of lived experiences and perceptions. If, as Cole and Knowles (2001) claim, life history research requires an artful approach, then we are incumbent to provide room for people to respond personally to the art produced.

To confirm, the principal end products arising from the outlined methodologies and methods are the narratives of the participants' coaching life histories, which are presented in the following chapter, and were derived from each participant's initial written life history, the six interview transcripts, the timeline trajectory of perceived expertise, the storyboard mindmap, and the future facing written life history.

To summarise, the potential value of these stories for others is as follows. They offer a holistic representation of messy reality, and an evolving picture over time, featuring the interrelationship of the coach, the context, and the process of expertise development. The storied understanding of other coaches' perspectives and realities features rich exemplary knowledge of in depth and in situ cases of local circumstances. Thus, practitioners may learn from these examples of another's

³⁹ Looking across the narratives is important because some of my research questions are concerned with common qualities or experiences of participants. Moreover, although the coaches' journeys are likely to be idiosyncratic and their stories unique, due to the complexity of coaching and expertise development, this does not preclude the possibility of similar experiences, trajectories, transitions, issues, and processes (because of a shared humanity, field and narrator) – from which broad guiding principles on how to deal with associated matters related to learning and development might be derived. In this way participants may be predisposed towards certain elements of shared stories, and myself as the researcher might be sensitised to picking up on particular common themes as a result of my own studies and experiences.

experience and wisdom, by weighing similarities and differences with their own experiences, connecting or identifying with their own phronesis, and drawing out personally meaningful or inspiring messages. Furthermore, such situated authentic accounts may be inherently accessible and appealing to other coaches as legitimate sources of knowledge, to potentially inform their own flourishing. The stories of the coaching life histories of the participants, with an emphasis upon expertise development, follow in Chapter 4, after the next Reflexive Interlude.

Reflexive Interlude 3 – My (Own) Coaching Development Journey So Far

I suppose my earliest memory of coaching is from when I was about eight years old. We would play football for hours on end (until it was too dark to see the ball) on the pitch that backed on to my parents' pub, and join in with a wide variety of others. One day, a much older boy we knew (he must have been around seventeen) decided for some reason to try to improve two or three of us younger boys, and set about a rudimentary coaching session. It was a rough neighbourhood, and we were not the easiest of people to coach I suspect – but two things struck me immediately. Firstly, what an honourable thing it was for this older and more talented person to willingly invest his energy and knowledge in trying to improve our football, for no apparent reward. Secondly, despite his considerable sporting ability, and social standing as a result, that this attempt at coaching was not an easy or straightforward matter (even for him).

I was always one of those pupils at school who had strong ability across a wide range of physical activities, and sport was always an important part of my life, especially as a means of gaining status among my peers, and enabling me to mix socially with a broad range of people (despite being cripplingly shy). Thus, I loved physical education, and achieved highly, but I gradually became increasingly frustrated at the lack of value that was added to my development by teachers and coaches. I think it was just assumed that I had natural ability, and I was simply encouraged to express it physically. For example, I always did well in athletics, and only lost my first 800 metres race, at a big Crystal Palace meeting, when I effectively came third in the country. But on that day, I noticed that the other runners had spiked athletics shoes, while I had flat trainers with holes in the top. Also, my PE teacher stayed in the stands laying bets on how I would perform rather than giving me advice. “Oh well, “I thought “That’s it.” on losing – it never crossed my mind that I could improve, or be improved, further.

The lack of development coming from teachers/coaches may be somewhat with the benefit of hindsight. But I do recall one particular incident, when the secondary school football team I played for lost an important game. We asked our coach on the way back what had gone wrong, and his enigmatic reply was only “You have got a lot to learn.”, and I remember thinking “Teach us then!” In effect we received little guidance,

were encouraged to just play, and work things out for ourselves if we could (as a result of laissez-faire attitudes, rather than from any deliberate attempt to encourage discovery learning).

By my late teens I had started to be interested in the coaching challenge myself. I recall training a group of younger players from my local community (on that same pitch as previously mentioned), and kitting them out, plus entering them in a tournament. I really enjoyed the process, but the team suffered an embarrassingly early exit from the competition, despite our lengthy preparations. I realised that I was very much a novice coach, and had much to learn, in spite of my enthusiasm. This halted my development in the short term, but was a valuable long term lesson.

About four years after that I was working in my first full time job as a milkman. I was bored and saw little value in what I was doing. With the snow piling up around my feet in the open cab of my electric delivery vehicle, I had an epiphany that I wanted to be a physical education teacher, and add some value to others through such a role. Key to this on reflection is that I believed I could do a better job than my own well-meaning but ineffective teachers that I had experienced. Despite having a young family, I quit my job, and went back to (higher) education.

At university I picked up several coaching qualifications in a range of sports, alongside my degree study, and teaching practice. This was a period of rapid development for my coaching, and my confidence grew. I had some wonderful lecturers, who were also coaches. One critical incident that stands out relates to my gymnastics coach, who taught me to accomplish difficult vaults and other complex skills, while having a fused spine herself. This stands out because it taught me that it is possible to coach others who are more physically able than you, and that coaching is more rich and complex than just providing demonstrations (yourself).

After graduating, I have spent more than a quarter of a century working in education at various levels. Coaching has always either been a part of this, or running alongside. For instance, I have operated as a specialist sports coach in youth centres, been responsible for all sports team preparation and provision in a further education college, and have been the first team coach for a semi professional football club. I have had

the privilege of being part of the development of trophy winning teams, and of individuals who have gone on to represent their countries, or play professional sport. However, I would say that I was mostly a participation coach in my early career – mostly providing athletes with only basic skills and encouraging them to take part. As a performance coach I was largely still novice-like. For example, when I organised the FE college sports programmes, I was satisfied with a win ratio overall of around fifty percent, and was as concerned at how many games and sports we played, as I was with how many times we won.

Nonetheless, I was starting to be bitten by the performance coaching bug. While at the FE College, I won my first trophy as a coach, and experienced some really rewarding performances from another team in a sustained winning run. The interesting thing about these was that they were in sports that were not strengths for me – cricket and basketball (I was qualified as a coach in each, but at the lowest level, and I was certainly no talented player). I really enjoyed being able to help and add value to players more talented than myself, and became fascinated with the coaching process. In retrospect, this is when I feel I started to take performance coaching seriously, and started to move towards more expert-like status in facilitating others. I remember somebody filmed me coaching the basketball team during a time out in a game. It all looks rather normal, and I appear respected and in charge, but I was actually drawing skilfully upon their own knowledge rather than mine, and using facilitative questioning to direct attention to crucial factors.

I gathered further diverse coaching awards (e.g., Speed, Agility and Quickness), and a variety of experiences (e.g., as an Aerobics Instructor and Personal Trainer). My knowledge related to coaching was becoming broad, more sophisticated, and battle hardened through practical application. Consequently, I found greater success as a coach at higher performance levels. Some achievements were absolutely remarkable. I coached one Judo athlete from complete beginner to a gold medallist at a major tournament, in only nine months. Not only that but he won with three completely different ippon (knockout) throws – when most high achieving athletes in the sport have competitive success with only a narrow range of techniques. I started to believe that through good coaching I could genuinely add great value to others, and grew in

confidence. I perceived myself as more towards the expert-like side of coaching, and my attainment of awards mirrored this (e.g., I attained Level 3 in Judo and Football).

With all due humility I have always been quite intelligent, and, thus, I was able to not only understand the content of coach education awards, but was also able to apply the principles in action, and follow up further on associated theory myself. I think this accelerated my development as a coach. But in terms of finding suitably more advanced coaching experiences I began to become frustrated – firstly, because I was reaching a fairly high level in my main job, and was thus under pressure with increasing (and increasingly administrative) workloads, leaving little time for coaching. Secondly, I think some people in sport are suspicious of coaches who are well educated, work across several sports, and have not been top level performers themselves – hence, I encountered something of a glass ceiling that I believe hampered my further development as a coach.

Nonetheless, even though I had moved into even more senior and demanding job positions in higher education (which involved me lecturing in sports coaching, and designing degrees which included sports coaching), I did manage to secure some interesting and challenging coaching projects. Firstly, I acted as First Team Coach for a semi professional football team, and implemented a science based pre-season training regimen with some success. Secondly, and more significantly, I secured a position as Head Coach for a local performance level (but amateur) women's football club. This was my longest (three years) and most responsible (two teams and around forty players) performance coaching position. I really valued having sole control of the direction of coaching, and to chance to innovate, and do things my own way. We not only sustained two teams (very unusual outside of sides linked to bigger men's clubs), but achieved consistently high league positions, a sixty percent win record, and three cup final appearances (winning two). It was highly enjoyable, and I was able to experiment, and sharpen my expert-like qualities. The critical incident that stands out is one season where we had a superb pre-season that really set the platform for good performances. We went on to win a cup with the first team, and a week later I took the second team to another final where we faced a team that had really thumped us a couple of times during their league winning season. Despite being underdogs, I worked hard to help prepare the team, and we comfortably won 5-1. It was what I

perceive to be the zenith of my expert-like status as a performance coach. In the following season, the club played some of the best competitive style of football I have ever helped produce, but we faded later and lost in a final, and politics forced me out early in the next season. I left with both teams top of their respective leagues, although the club has sadly declined since. Overall, this experience had confirmed my love of coaching, that I liked to have independence in the coaching role, and that I could make a positive difference in being immersed in the performance coaching of adults.

The season after that I had the chance to become Head Coach of a womens' football team, in the second highest league in the country. While I relished the challenge, I sadly eventually had to withdraw my interest, having reflected on the reality of balancing the demands of this role with my personal and professional life. The only coaching I have since done, is the occasional masterclass session at university, or coaching a new girls' football group in the village where I live. In terms of my expert-like status, my knowledge of coaching and my study of the area continue to grow, but I feel that I am becoming somewhat less expert-like as I cannot find a practical coaching project I can effectively fit into my busy life. I am falling back with my practical coaching, or at least becoming more progressively unbalanced as regards theory and practice. Ironically, because of my theory-based status (giving talks on famous coaches, etc.) people probably think of me as more expert-like regards practical coaching now – but my own identity as an expert-like coach is waning somewhat, and the room for me to take up stimulating coaching projects is increasingly constrained. Nevertheless, I console myself with the observation of one of my former coaching students (who is now a national coach himself), that I have not stopped coaching, but have just taken it to another level (in helping to get the best out of other coaches through coach education).

So, in conclusion, who is David Turner the coach? Well, a bit of a frustrated coach. A bit unbalanced towards theoretical knowledge rather than practically applied expertise at present – but maybe this is a bit unsurprising given my job? I guess I am perceived by others as being more expert-like than I perceive myself. Nonetheless, I do have considerable experience, qualifications, and knowledge of coaching, and I care deeply about it as an honourable and worthy role. Plus, I have come to know myself well as a coach. I used to believe that coaching was about getting the best out of people, now

I believe it is about helping people to get the best out of themselves. A subtle but important difference. I am more of a process coach than a product coach; the long term development of teams and players is more important to me than the outcomes, although I have come to appreciate that I like winning much more than I had appreciated.

The coaching perspective permeates my life in many ways – much of my being is wrapped up in coaching related principles, and I've invested a lot of my life in coaching roles. I am more expert-like than most in regard to coaching, but not only do I know that I don't know everything, I also know that in some senses at present I may be slightly regressing in respect of my expert-like status. For example, I would like to undertake my FA Level 4 award, but realise that I need to be regularly more (re)immersed in everyday practical coaching before I can realistically do so. Nonetheless, I perceive that I am far from novice-like, and any regression in my status is something of a controlled decline (see Figure 8). I suspect that some sort of opportunity or defining moment may present itself in the near future, which will propel me back into more practical coaching, and (re)stimulate my development towards more expert-like status once again⁴⁰.

David Turner (July, 2011).

⁴⁰ Subsequently, I was invited to guest coach a boys' under 15 football team in the village in which I live on a once monthly basis. This represents a Masterclass, at which the other club coaches observe, assist, and discuss with me afterwards. This is a pleasurable coach education setting, a welcome revisited challenge (I have not coached this age group for twenty years), and keeps me in some touch with practical coaching (February 2012).

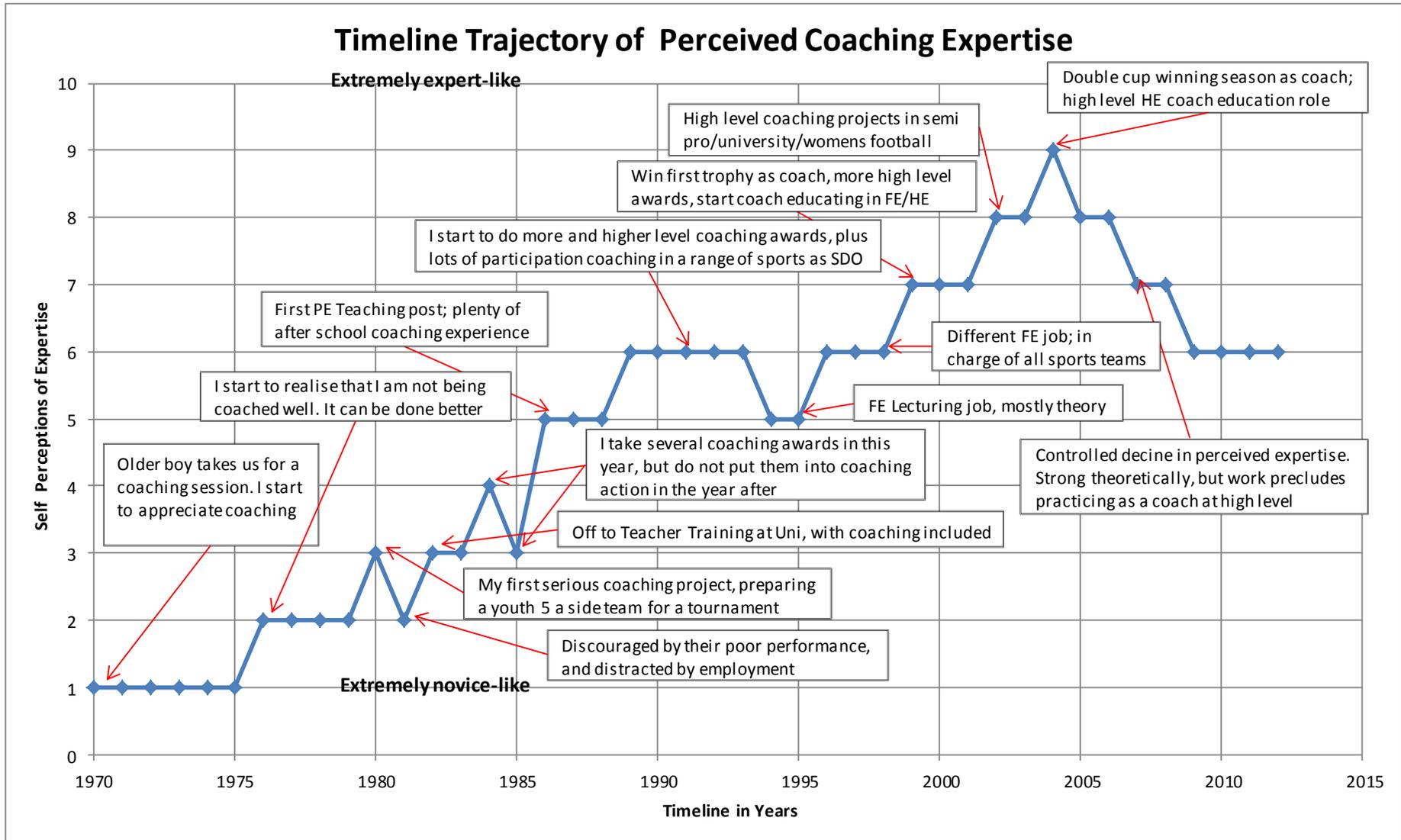


Figure 8. My Timeline Trajectory of Perceived Coaching Expertise.

Chapter 4: Findings: Four Coaching Life Histories: The Experience of Becoming and Being an Expert-Like Sports Coach

4.1 Introduction

Presented here (in the following order) are the stories, timelines, and storyboards⁴¹ for each participant. The stories are written in third person, not as a result of a conscious decision, but rather simply because it felt right. I believe that I was probably influenced in this regard by dominant narrative traditions in the arts that I have been exposed to throughout my life. Hence, third person has been referred to as the most commonly used and flexible narrative mode in literature (Weiland, 2016). However, on reflection, and to paraphrase Mishler (1991), I sense that this approach was especially useful for transforming the protagonists' stories (based on their knowing about their own experiences of the development of perceived expertise) into a narrative form anchored to the focus of the current study (a telling of tales with a particular purpose).

The timelines represent the trajectories of perceived expertise development for each participant over the years of their coaching life histories, with accompanying annotations on associated critical incidents along the way. The storyboards depicting the emergent themes and related sequences of events should be read in a clockwise manner for the constituent branches, starting in the top right-hand corner. Consistent with the co-constructed and interpersonal nature of this research, the stories, timelines, and storyboards, were all formed as a result of interactions between myself as the researcher and the participants (principally related to the guided writing of life histories, the production of the timelines, and the repeated interviews), and were agreed by all participants as authentic representations of their coaching journeys. All participants indicated they were comfortable with the content, and would be happy for their stories to be shared as potential coach education resources in the future.

⁴¹ These are summary storyboards only – the actual mindmaps used to help draw all of the data together for each participant are too large to include in this thesis. Indeed, even the summary storyboards for William and Sam are large enough that they are split into part one and part two when presented later in this chapter.

4.2 David's Story: The Busyness of the Long Distance Running Coach

Experiences as a Runner

David first became involved in distance running in his early teens due to a desire to develop some semblance of competence in at least one sporting activity. Sport did not feature prominently in his family background, and he considered himself not blessed with a particularly strong set of athletic attributes; and running thus appealed, given that, despite the lack of a refined skill base, it seemed that you could still do reasonably well if you committed to training frequently, and with applied intelligence. Moreover, it suited his own individualistic, self-starting, and somewhat obsessive nature, and precluded reliance on a team, parental support, or coaching, to the same extent as some other sports he had sampled. This was, therefore, a strategically selected sport to participate in, where it was perceived to be relatively easy to add value through hard work and intellect.

In his late teens David trained regularly with a very successful local athletics club, but was invariably one of the slowest runners in the group, and, although some high-quality coaches led sessions, they tended to concentrate on the needs of the fastest athletes. However, it did not trouble David greatly that his own coaching needs were overlooked or not prioritised at the time, and he later discovered that the coaches appreciated his work ethic and enthusiasm to make the most of his limited ability. Nonetheless, he remained involved in distance running during an era of excellence for Great Britain; with, for instance, numerous county and national standard athletes featuring in his endurance training group when at Oxford University, and one in particular who was placed fifth in both the Olympic marathon, and World Championships 10,000 metres.

The only occasion when David experienced an element of one-to-one coaching was during a period of several months where he linked up with a very good supportive coach, who worked with various national standard athletes, and even an Olympian. But the coach was in such demand that it proved difficult to secure sufficient one-to-one coaching provision, or to meaningfully extend or develop the relationship. Nevertheless, over more than twenty years of competitive racing David completed

nearly twenty marathons, with very respectable times consistently around two hours thirty minutes, and represented Middlesex twice in distance events at County Championships. He had effectively triumphed over a lack of athletic ability, through purposeful (or even obsessive) training, and enthusiastically embracing the running bug. But, he sensed that his development had been non-optimal, in that he was largely self-coached, had mostly lacked an objective external guiding figure, and that his training practices might have been even better informed and smarter.

Moving into Coaching

It was an unproblematic and organic progression from David's running background to adopting a coaching pathway. He had been a committed, well read, reasonably analytical and reflective long distance runner, but, in his thirties he suffered a series of injuries that meant his best days were behind him, and he was not greatly motivated by working through a controlled decline, nor by engaging in veterans' athletics. Notwithstanding, he remained driven to stay involved in the sport that had been a large and positive part of his life, and to make his own mark upon it if possible. His own experiences of injury had developed basic anatomy and sports medicine knowledge, and he had also come to understand well the application of aerobic cross training methods. Moreover, as a senior athlete he had begun to find himself offering informal advice to other runners. Furthermore, he had always generally considered himself to be clued up about the sport, and absolutely fascinated by high performance aspects, so a move into coaching was a natural choice.

From the outset David had a clear intention to do things differently in the coaching role, as a result of his own formative experiences. Hence, in an effort to pitch his coaching in a distinctive manner that would be likely to make a discernible difference he quickly moved beyond the standardised expectation of group sessions once a week to offer one-to-one coaching, and tailored individual advice on training regimes, incorporating long term planning, and performance goal setting. Soon David had achieved his Level 2 United Kingdom Athletics (UKA) coaching award, and was actively coaching a small squad of runners, and advising others. However, as he was based at a fairly staid declining club with an ageing membership, and a virtually non-existent coaching structure, David was compelled to seek out high quality mentors and

advisors from elsewhere (including beyond the sport), intentionally delving into his rich professional network of contacts from athletic clubs and university, as well as his employment at the time with Sport England (working on World Class Programmes supporting elite British sport). Within a year David had progressed to starting the UKA Level 3 coaching award modules, and was coaching eight runners, made up mostly of a talented pool of ambitious and committed women, who went on to attain a team medal at the South of England Cross Country Championships, and later won the National Team Marathon Championships. Thus, David had some early competitive success at regional and national level associated with his coaching, and at around the same period he successfully completed the Level 3 award.

By 2007 David was beginning to undertake coaching beyond the confines of his home club, and was fulfilling an Honorarium role for England Athletics (EA) as an Endurance Coaching Coordinator for the London area (this later evolved into a more formal Area Coach Mentor role, in what might be regarded as another natural progression into coach education). Concurrently, he was taking the Level 4 coaching modules, which, although maligned by some, did involve engagement with high quality materials, interesting experiences, and stimulated reflection upon practice. Nevertheless, David sensed that the balance of the curriculum may have shifted too far towards continual reflection, rather than the technical aspects of coaching so important at this level, with busy coaches potentially encountering the quandary of whether to concentrate their efforts mostly on dealing directly with the athletes being coached, or on reflecting in detail on the last training session they had led. In contrast David found it extremely useful (especially in relation to his later mentoring role) to be pushed during the course into drilling down into the fine detail of his coaching philosophy, and in doing so to move past superficial clichés to explore in depth personal motivations, and the likely effectiveness of performance improvement interventions.

Broadening the Workload

Having possibly grown beyond the context he was operating in David started to ponder if his own club was not simply too far into decline, and devoid of ideas and ambition, to be able to best utilise his coaching, and adequately offer opportunities for the progression of his work. Hence, in accordance with his strong belief in the need to

make your own luck, he began to consider which alternative club it might be most beneficial to move to. Before long not only had his voluntary coaching commitments expanded further, but he had additionally established his own commercial coaching website (which particularly offers one-to-one coaching provision). So, his own ongoing development as a coach was simultaneously stimulated by the diversity of supporting novice runners (testing general coaching skills, such as communication, planning, and interpersonal aspects), and elite athletes (requiring him to attend to the minutiae of high performance factors). Around this time he also took on a regional Team Manager position for distance running, and went on to coach national and international standard athletes.

However, as the number of individuals that he coached mushroomed David was aware that resulting time constraints might potentially impact upon his capacity and resolve to engage with continuing professional development (CPD), and that there was consequently a risk of becoming complacent about one's level of expertise. That is, it would be all too easy to become too busy coaching to satisfactorily address one's own further development. Conversely, what had by now morphed into an Area Coach Mentor position with EA offered a rich learning environment for David, and a plethora of high quality developmental opportunities. Firstly, it opened access to tremendous learning resources, with David having the chance to work with some of the best coaches in the UK, being allocated time and a budget for his own CPD, and learning from National Mentors, and international experts brought in to speak at conferences. Secondly, through David then cascading down information to his mentees, who were themselves often experienced, thoughtful, and successful coaches, he found himself to be learning as a coach through the process of educating other coaches.

Furthermore, David's education was consolidated by being commissioned to write two books on distance running, since, prior to publication, he was compelled to rigorously think through what he wanted to communicate, and to be crystal clear in terms of his messages conveyed. Although the audience for these texts might not necessarily be an elite one, reconsidering several principles generally applicable at any level (such as periodisation) proved a valuable focussing exercise, implicating writing as a form of learning. Nevertheless, David would not claim to implement in coaching action all

of the methods he outlines in his books, recognising an inevitable gap between theory and practice. However, having published these specialist manuals would implicate a heightened public perception of his expertise in the subject area. Likewise, David's profile was further elevated by his completion of the UKA Level 4 coaching award, and more work across various clubs (such as flying coach visits, and coach education presentations) as part of his EA role, as well as adopting an EA Marathon Team manager position, and becoming *The Guardian's* marathon coach for an online blog.

Interestingly, being keen not to be pigeon holed as just a marathon coach, David has made deliberate efforts to extend his expertise into different but associated disciplines, establishing links with the British Milers Club, having marathon specialists undertake lower race distances in certain training phases, and embracing middle distance options at conference presentations and in mentoring opportunities. Moreover, he has also tapped into emerging markets in ultra-distance running and triathlon, and may even undertake the British Triathlon Federation Level 2 coaching award to strengthen his credentials in relation to the latter, although he is not aiming to directly coach the swimming or cycling aspects.

Reflections and Dilemmas

In terms of further strengthening his central pillar of expertise, endurance coaching, David believes that he needs to address steeplechase and race walking elements to a greater extent, and to incorporate the use of technology in his coaching practices beyond some obvious sports science applications currently employed. But, while he freely admits to being hampered in the latter regard by his being something of a technophobe, David remains sceptical of the value of some technological innovations, in that new ways of presenting information are not necessarily an improvement upon more traditional means, and may even dilute the quality of coaching messages in some instances. Thus, whereas it is undoubtedly important to remain open to new ideas and possibilities, David might agree with legendary coach John Wooden's quote that: "There cannot be progress without change – even though not all change is progress."⁴²

⁴² Wooden and Jamison (1997, p.96)

In relation to his own coaching practice David believes that he perhaps pays insufficient attention to the movements skills and technical efficiency components of endurance running, for a combination of reasons. Firstly, naked eye observation is not deemed by him to be a personal strength, even when augmented with video analysis tools. Secondly, due to having limited face to face time with athletes he attempts to prioritise running activities and structured discussions during coaching sessions. Thirdly, as a means of managing the consequences of the previous points, he tries to coax athletes to practice some technical aspects on their own, at suitable points in the training cycle, once they have been provided with a clear idea about they are doing and why. We may infer from this that while David may know his coaching strengths well, he is also willing to let athletes be their own best coaches in other aspects, as a means to an end.

It may be recalled that from the outset David selected a sport where he felt it was relatively easy to add value, and where a well-developed skill set was not a necessity. However, even within the fairly restricted world of endurance running there is a great diversity of differential needs, and specialist client groups for a coach to attempt to cope with; from youths to veterans, middle to ultra-distance, and runners to triathletes. Additionally, David has encountered some significant dilemmas in terms of the balance of his own work portfolio - between working with athletes and mentoring coaches, between supporting established/elite athletes and encouraging novice/recreational runners, and between undertaking voluntary and paid coaching duties.

Coaching may be considered to be always a very difficult balancing act, and where David draws the lines on all of the above predicaments is patently a crucial ongoing decision making process that will determine priorities, likely outcomes, and perceptions. Overriding everything is the setting of all of the above against his having the requisite quality time, and capacity, to engage meaningfully with CPD. Nonetheless, David would not seek to be narrowly defined (by himself or others) as merely an expert endurance running coach anyway. Although it is, and remains, a significant and fulfilling part of his life, it is by no means the be all and end all, and does not encompass everything he would desire from existence.

In regard to the general education of sports coaches, David would adhere to the view that we need to move towards a more individualised, tailored, and self-directed promotion of coach learning, with coaches encouraged to be self-reliant in respect of their learning needs. In a similar vein David finds himself critically considering where best to invest his coaching efforts in order to get the best results. For instance, which cutting edge marginal gain interventions from elite level might realistically make a positive difference if percolated down for lower level runners?

A particular challenge that David faces is his general busyness as a coach, and the juggling of commitments that this demands. Consequently, he sees possibly the greatest threat to his expertise to be not adequately managing his own growth and development in the face of his overall coaching workload. This is especially an issue because, as an individual who is associated with the national governing body of the sport, David feels a responsibility to be actively modelling best practice in terms of learning and development. For example, he can occasionally find himself caught up in a number of run of the mill coaching projects that do not seriously test his capabilities or boundaries. Hence it can prove a challenge losing time to more repetitive roles rather than developmental ones. As a further illustration, although he adheres to the expectation to always be pushing on developmentally, David perceives that he tends to work largely on his own coaching strengths, with room to work on weaknesses something of a rare luxury. Furthermore, he senses that such matters are exacerbated by recent changes in the running culture, whereby he finds that he has to manage a greater amount of unrealistic expectations from recreational clients in terms of timescales for athletic performance improvement.

David has worked hard to build a commercial return from a certain portion of his coaching, but finds that he needs to be self-aware in regard to sensitively balancing this against being seen as someone who also works in sport for sports sake as a committed volunteer. Nevertheless, after thirty years in the sport, and persuasive evidence on his web site, David tends to live up to others' expectations of expertise in regularly recruiting new runners of all standards and types.

One specific concern for David is the emergent imbalance of genders in the athletes he coaches. Despite early success in supporting the performance of female runners, the composition of the club training group that he coaches is now mostly male. This makes him feel somewhat responsible in the face of the challenge of attempting to develop a reasonable female endurance squad at the club, particularly as he is likely to be seen as the most experienced coach in this regard. When he joined the club six years ago he would not have envisaged the current state of the women's section, nor believed the relative lack of progress in female performance standards, causing him to ponder why it is that he is not making much of a difference, or affecting the infrastructure, or whether he had taken his eye off the ball somehow in relation to this matter.

Notwithstanding, the most significant critical incidents on David's coach learning journey towards expertise have been tapping into excellent people through intentional professional networking, gaining the EA mentor position (a significant external validation that also opened access to powerful learning resources), achieving coaching success at high level with certain athletes, and a variety of good testing experiences encountered (such as a recent intensive interview for a national coach mentoring position that stimulated deep thought about his practice).

David seems to be an intellectual (perhaps even bookish) coach, who, interestingly, seems to attract intellectual athletes as a consequence. He critically evaluates the incremental value added by his coaching, in a rigorous attempt at a cost benefit analysis of the potential marginal gains for performance. Indeed, David finds himself most uncomfortable when he is not able to add value through coaching, displays a sense of pride in making a positive difference in his coaching work, and has a keen desire to leave a personal legacy from his coaching efforts.

He regards his own coach development as having been an incremental process – a concatenation of small events, and the incubation of the ideas arising from them – rather than a series of major sea changes. A general evolution of his coaching approach via being repeatedly prodded out of his comfort zone, and tested by changes in context and client group, accompanied by reflection to guard against complacency.

As stated earlier David believes that we tend to make our own circumstances and luck in life, but he remains aware that some factors beyond the coach's control can either evolve unintentionally or happen suddenly. For example, David wonders why the gender balance in one of his training groups over the years has altered from a female to a male dominance, for no apparent reason.

The trajectory of David's coaching development has been smoothly undulating over the long term, but has ostensibly been a mostly linear but upward flattening curve of growth, potentially reflecting the law of diminishing returns as one reaches higher levels. Nonetheless, his own coaching expertise has naturally extended into other associated areas and sub disciplines during this progression (for instance, he now has a Level 3 coaching award in strength and conditioning). Intriguingly, David does recognise that there can be quite a fluctuation in perceived expertise at the everyday level, particularly in connection with emotive aspects, whereby you can sometimes be left feeling either transcendent or ignorant in the moment (especially if you are overly reflective on every experience). This is something that he claims coaches need to become accustomed to dealing with.

In the course of the last two years David believes that there has been a significant development in the quantity of his coaching, which has not always necessarily been matched by the development of quality. His standout high performance athlete is now on a scholarship in the United States, working with an elite coach, so David has a more passive role limited to inputs on tweaking the training programme, and vacation based training. Likewise, the faster female athletes that he coaches have all moved away from the area, such that, while links are maintained, the coaching process is less robust, and compromised by his not knowing their club session plans well. David is now coaching about a third, or even forty percent, fewer athletes as a volunteer than a year ago, although he suspects (and hopes) that this might simply be cyclical.

However, with more athletes, one positive learning experience is David's accumulation of greater case history experience of various injuries and his associated rehabilitation (rather than diagnostic) role. Despite his busyness, David has recently been to extensive and detailed EA/UKA conferences on cutting edge areas, though there may

be some mismatch of the knowledge gained to the specific needs of the athletes he coaches (e.g., altitude training; lactate tolerance work for middle distance runners).

Looking to the Future

David trusts that his coaching curriculum vitae is good enough, and his character is suitably engaging, that he will periodically attract runners who are sufficiently able and committed to aspire to national standard performance. Granted that this in itself would not inevitably raise his expertise, rather just ensure the level at which it continues to be applied. In terms of supplementing his knowledge David is currently establishing links with physiotherapists, and making arrangements to share case notes on dealing with injuries. But, generally, he does not envisage a significant uplift in his learning over the medium term, and, indeed, it may actually be less given that he has too little spare time and capacity to do more. Additionally, he has of late discovered that, after five years in post, his role as Area Coach Mentor will not continue past Spring 2014. While this was merely a part-time position, without a national governing body remit, it fulfilled a professional objective to immerse himself in potentially relevant related materials, and David senses that he might lose some developmental momentum as a consequence of its cessation. Having stated the above David will remain involved in the EA National Coach Development Programme, though now nobody will be funding him to grasp the full gamut of opportunities therein.

In the longer term, with his daughter going to university in five years, David suspects that he could have some more spare time on his hands, and might also reduce his hours at his day job. Nevertheless, he doubts if he will ever get to coach at Olympic or World Championship level, due to his own modest credentials as an athlete, the club environment he works in (good but not likely to produce an Olympian), and the lack of an obsessive coaching drive displayed by some practitioners (he does not wish to commit all his time and energy to improving coaching, as there are other things that are important to his mind and spirit). But, he still recognises that it only takes one athlete at the right time and right place, or one particular national governing body role to fall his way, and things could happen. He is still very receptive to such possibilities.

In respect of how his coaching journey might eventually end David cites uncertainties about health, and his available energy and capacity to invest in coaching, as likely factors. He envisages retiring from work in around ten years, with a concomitant rise in free time available, which he would expect to fill with volunteer roles in running, at least partly in coaching. But, he would not want to be a full-time volunteer coach, or anything even close to that, when this time comes. He has not really thought about his coaching in detail beyond about five years hence, as there are too many uncertainties, such as the future state of endurance performance, the level of club competition in the region, and the type of coaches operating in the same area.

Final Thoughts and Legacy

For some years David has considered that the encounters with people one meets in coaching are more deeply fulfilling than the times that runners achieve. Thus, though he is always excited by seeing individuals perform well, and by having had a role in assisting them to do so, David feels that the human aspect may become even more important to him as he grows older.

David feels assured that, in relation to what we can manage or control in coaching, he has always been decisive and clear minded, albeit sometimes taking action slightly later than ideal. However, the changes relating to several good athletes moving out of his sphere of coaching influence, due to, for instance, shifting geographically because of employment opportunities, have been entirely beyond his control. As a counterfactual David recalls that when he decided to move clubs six years ago, they had one particular coaching guru, and some well-established support coaches in place, so he thought his own presence would add little value. But, then, when the guru subsequently left, suddenly there was something of a gap. So, if David had stayed he might have had greater input in a very different set up from the club that he is currently at (although he is content there too).

In terms of his coaching legacy, David would firstly like to think that he had contributed to improving the sport in some way, if only by a small amount, and in a local context, and not for every athlete he has come into contact with. Secondly, he would hope that there are a number of individuals who feel that their experience of sport, both in terms

of enhanced performance and of more fulfilment or enjoyment, has been greater as a result of his input than it would otherwise have been. Thirdly, he would aspire to be remembered as someone who coached with decent human and social values, as well as technical competency.

David wonders if his coaching story might convey some pointers about persistence, positioning, and balance. For example, in utilising diverse sources of learning and development, without overly relying on one; in maintaining the option of face to face interaction, whatever the alternative technology or web based options available; and having some sort of medium term coaching career plan in mind, even if it is not formally recorded. David also believes that an important message for other coaches is to not become too pigeon-holed within certain events or disciplines within your sport, and to keep your options open without becoming so scattergun that you lose your focus or specificity. He also cautions that coaches should not get too carried away with the highs, nor too doubting of themselves with the lows, on the inevitable ups and downs of the coaching journey.

Finally, in regards to his participation in the current study, David kindly states that his interactions with myself, as the researcher, were intellectually stimulating, and that he has considered me to be articulate, insightful, and a good listener. All this he has found refreshing, since he believes that the majority of work in sport is usually low on intellect and substance. His only regret, he expresses, is that because he has been so busy, he was sometimes as not well prepared for meetings as he might have been, and, thereby, it could be that he may have limited the potential benefit of being a participant. If he had more spare time, then he might have gone about it differently.

In the authors' opinion David is an exemplar for the coach as a hard-working intellectual figure, who thinks deeply, and cares greatly for his trade (but, he is not ultimately narrowly restricted to becoming obsessed with this potentially all-consuming role alone). Thus, for David, and those athletes and fellow coaches he has helped along the way, perceptions of his expertise have inexorably risen over the years to elevated levels, although David would shy away from the term expert, which he sees as being employed excessively in connection with commercial gain, and would prefer

highly experienced instead. His coach learning journey, reflecting to some extent his experiences as an athlete, features admirable resilience, and a progressive dogged accumulation of knowledge, experience, and qualifications; with the only slight concern being whether the sheer industry of his efforts might have at times been something of a partial brake on his development, an occasional side-lining of directional intentions, or the hampering of an even greater potential perception and actualisation of his own expertise. But who knows what could have been for any of us? Perhaps we should be content with what we have achieved in the face of the circumstances we have operated within? And then again, perhaps not?

A large part of coaching is embodied by who and what we are, and in this sense coaching may be regarded as an act of personal improvisation or interpretation. David has approached coaching in his own unique way as a result of his accumulated experiences, and for the most part gained happiness from adding value to others, in a sport that he himself had enjoyed so much. And so, what started as a quest for basic competency in a relatively straightforward sport, has culminated in an idiosyncratic expertise in the messy and multifaceted complexity of the demanding coaching role.

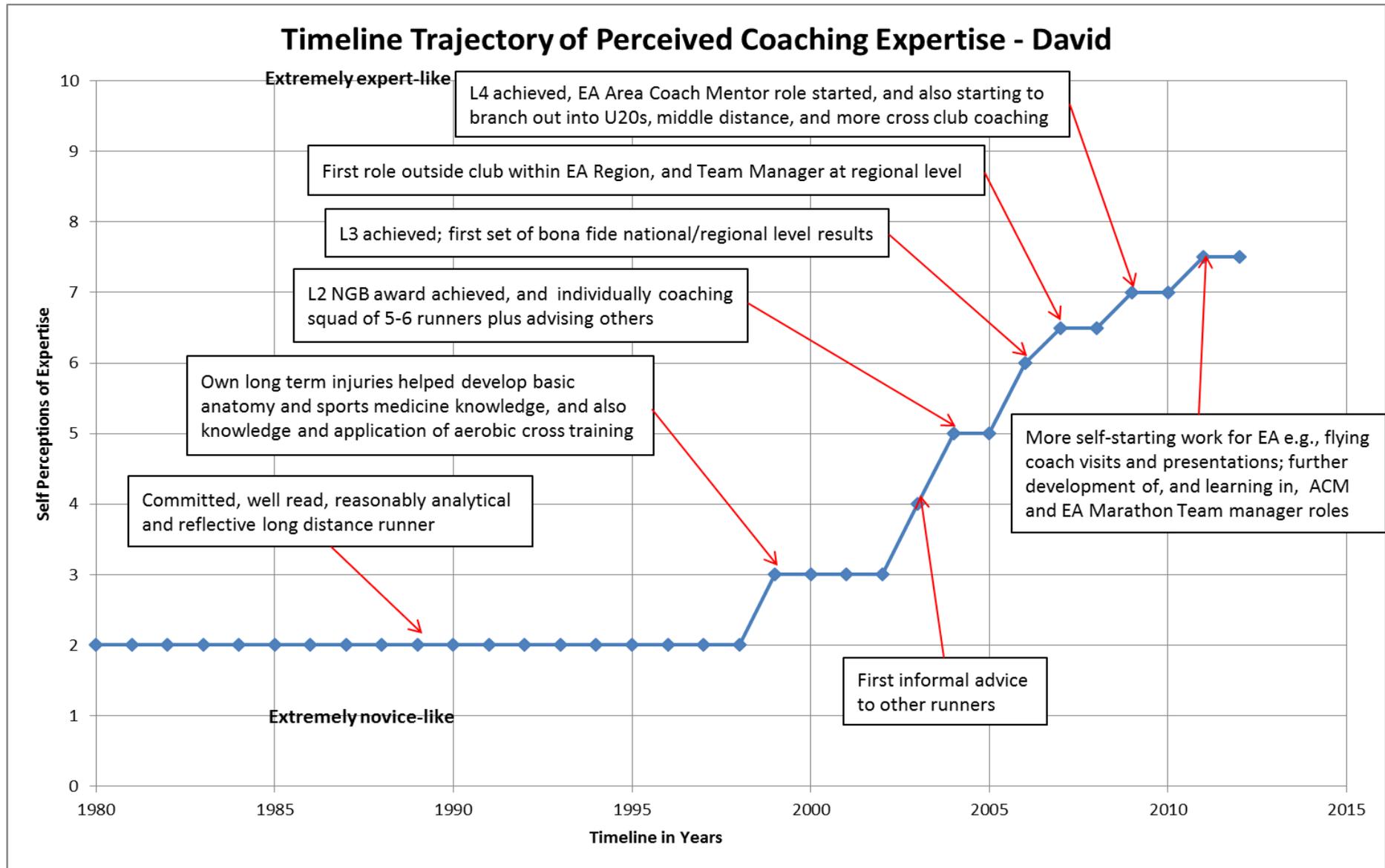


Figure 9. Timeline Trajectory of Perceived Coaching Expertise - David.

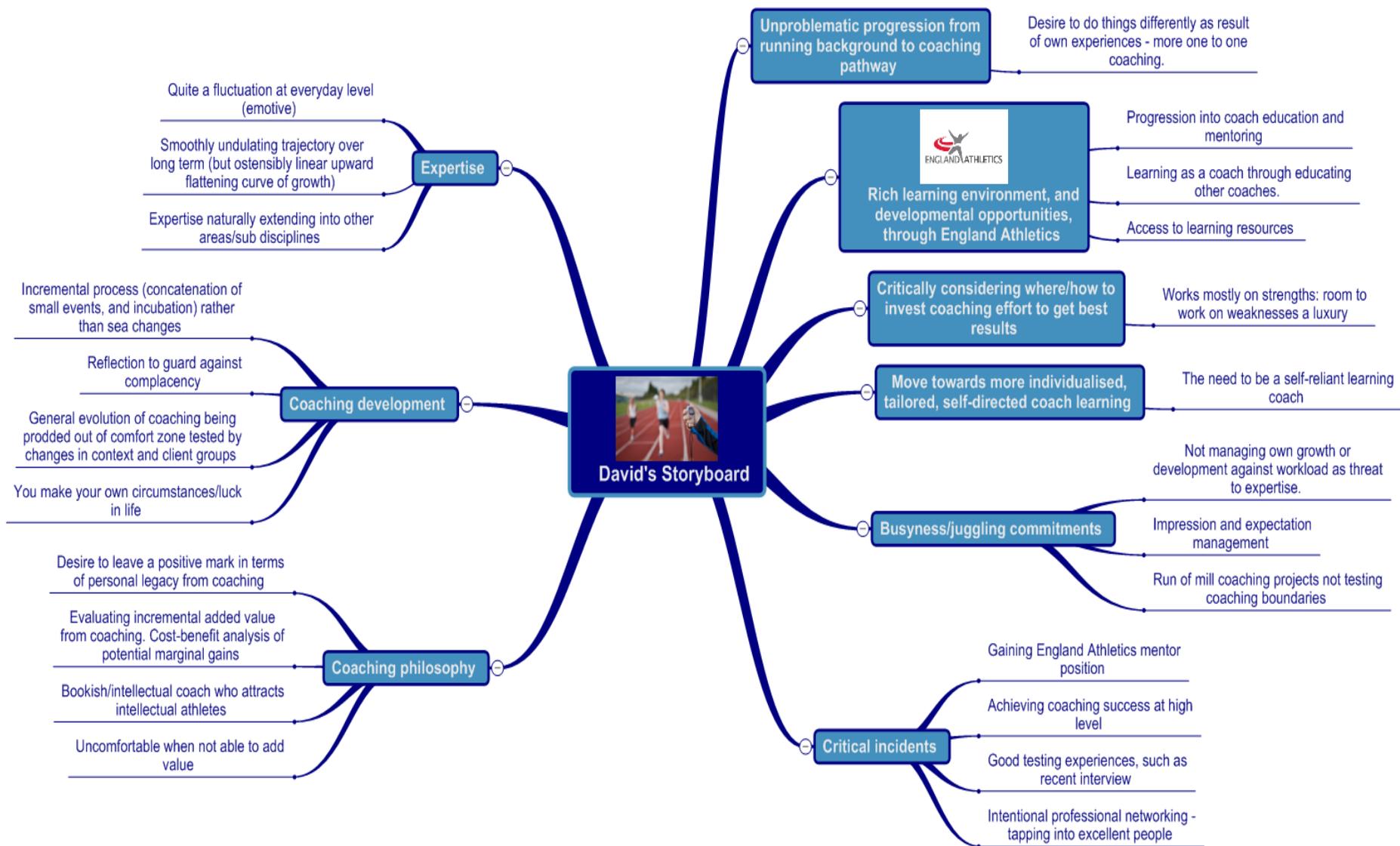


Figure 10. Storyboard for David.

4.3 Malcolm's Story: Doing Things Differently in Coaching

Early Sporting Experiences

Even from primary school days Malcolm was acutely mindful of the need for a thinking approach to sport, and the obligation to learn in order to promote performance. One could claim that he was in coaching mode even then, although at that point in time it was principally self-coaching, and self-education. So, when he was selected to play district football, Malcolm began to watch more games, listened more attentively to commentators discussing tactics and strategies, and became more aware of his own and teammates' positioning and capabilities. As a further illustration, when Malcolm was ten, he competed for the first time at an athletics meeting held at a cinder track, which sparked him to undertake some reading on how to cope with performing on such a surface. Hence, at a subsequent event, Malcolm arrived armed with borrowed spikes, and his Dad's garden trowel (to dig in his starting blocks), and proceeded to do his own warm ups and stretches (not rigorously undertaken by many at the time), before winning two sprint races. When a teacher asked who was coaching him, he replied: "*No one Sir. I read books about sport.*"

As a reasonably gifted all round athlete, engaged in several sports throughout his formative years, Malcolm continued to relish the excitement of school, district, and county sports events, and accumulated numerous medals, but, he remained largely self-reliant, and outside of the wider sports club system, until after leaving secondary school. At that juncture Malcolm joined Watford Football Club, where his youth coach emphasised fitness, and passing games, but included little skill development work (Malcolm was however intrigued when a pioneering Head Coach had the players do ballet exercises in an effort to make them more nimble⁴³). Later he spent some time playing at semi-professional level, but again encountered mostly unremarkable run of the mill coaching. As he grew older Malcolm took the opportunity to play for several amateur teams whenever he could get a game, and he particularly recalls one ex-semi-professional player in this context whose limited idea of coaching was to spit out

⁴³ The late Ken Furphy was an interesting coach who brought a fresh modern approach, and some success, to Watford FC in the late 1960's, before going on to manage the likes of Pele, George Best, Johan Cruyff, and Bobby Moore in the United States (Ponting, 2015).

derogatory negative comments, and merely act out the stereotype of an elite league manager. It occurred to Malcolm that there was a need to know more about coaching than this, to do things differently, and to understand the impact of your approach more deeply. However, at twenty-eight, an increase in work commitments suddenly caused Malcolm to largely bring a halt to his own participation in sport.

I Can Do This!

Some years on, when Malcolm was attending one of his son's under elevens football training sessions, the coach set up a blackboard and proceeded to go through detailed tactical formations, causing Malcolm to ponder that although he clearly had some coaching knowledge, this person had no realisation that he was not getting his message across in a suitable manner. A year later, Malcolm's son's primary school football team managed to reach the semi-finals of the foremost competition in the county, and at half time Malcolm decided to try to help calm the players' obvious nerves, then offered technical advice from the touchline in the second half. After the team won, the headmaster asked Malcolm if he would consider coaching the boys, and so he embarked upon his first sports coaching role, after being spotted as having some potential, despite lacking any associated qualifications.

In preparation for the final Malcolm organised skill practices on passing, creating space, and shooting, and, encouraged an approach of thinking about the game, and your opponents. For instance, he would talk to the boys about famous footballers, thus, providing motivation, and possible ideas to use in games. Here Malcolm was drawing upon his own long established developmental strategy of being inspired by, and analysing, high achieving athletes, and drawing upon the wisdom of others, since he adheres to the notion that we can learn profitably from anyone. Malcolm did not attempt to create little professionals, nor overcomplicate things so greatly that enjoyment was diminished in this setting, rather he wanted to keep things simple, and help the players to become more aware of their surroundings and options.

When the team went on to be victorious in the final Malcolm felt that he had managed to offer something to their development, such that in regard to coaching it was something of an '*I can do this!*' moment. Attempting to coach players to think at this

level was a somewhat unusual approach, and may have been inspired by Malcolm's learning about mentoring at this time, in his commercial and industrial work environment, from his German managing director, Eric Braun. When Malcolm had a problem, Eric would not just give an answer, but would ask questions that would provoke Malcolm to think and work through a potential solution with him. In essence this vocational experience was a crucial platform for Malcolm's coaching, encouraging him to treat people as individuals, empowering others to think for themselves, and take responsibility for their own ongoing learning.

Losing, Regaining, and Regenerating an Identity

Malcolm was soon swallowed up again by the demands of work, travelling around the world for a multinational company, although this did include some element of educating, training, and mentoring other staff, in what he now considers was his earliest real coaching career. His sporting involvement declined further, although he did spend a memorable season playing for a French masters' football team, at forty five, and learning a great deal from some wily old professionals, which reignited an interest in teaching and coaching. Nonetheless, when he eventually returned home from working abroad he weighed twenty stone, had a sedentary lifestyle, and was drinking and smoking heavily.

Then, a bet with a pub landlord that he would not run a half marathon in a certain time unexpectedly caused Malcolm to reengage with sport, and, moreover, after he joined a running club and discovered that the coaching was absolutely abysmal, rekindled his love of teaching, so that he found he had developed a desire to be a sports coach. Soon, he was immersed in studying, achieved his first athletics coaching award, and became for a short time an endurance coach for runners (for example, supporting London Marathon finishers), as well as briefly coaching sprints. Concurrently, he started coaching throws (shot, discus, and hammer), which was something he had flirted with himself at school. Intriguingly, this also caused a subtle shift in Malcolm's coaching pathway, in that beginning to learn about being a throws coach, meant that he was additionally required to become more informed in regard to strength and conditioning.

During these initial years of sports coaching Malcolm managed to instil some much needed belief in several marathon runners, and then, crucially, his throwers started to improve, and take off in terms of their achievements. In 2000, Malcolm got six junior athletes into his first ever English Schools final, with one picking up a bronze medal, and his reputation for preparing athletes for competition, and adding value, began to grow (eventually he would become known by some as Mr 20%, a phrase coined by one of his athletes). And, as his athletes tasted success, Malcolm wondered if he might be turning a corner, and becoming a proper coach who could help athletes genuinely make the transition from local to national standard. A year later one of Malcolm's athletes qualified for the inaugural UK Schools Games, and came third in the discus event, establishing a tradition of his athletes being represented at every subsequent running of this event, with consistent silver and gold medal outcomes.

By now Malcolm was becoming recognised as an established throws coach, known for coaching winners, although he remained plagued with doubts as to whether this was really because he was effective, or his athletes were simply naturally talented. Nevertheless, adhering to his conviction that education is fundamental to success over the long period, he deliberately plunged himself into further learning to promote the chances of becoming a good, or even great, coach. This represented a coach learning epiphany, which was a pivotal moment in the progression of his coaching career, as he came to the conclusion that he needed to intimately understand what an elite athlete needs in order to become a champion, to be able to assist them well in achieving the level of desired success.

Education, Education, Education

Malcolm soon discovered that he needed to move beyond merely attending a few governing body coach education courses, which seemed to him to provide an insufficient depth of knowledge, and feature little interdisciplinary breadth, relative to his own perceived needs. Therefore, he deliberately took the decision to promote his own education, setting himself clear goals, locating the suitable resources he required, and critically reviewing athlete development programmes, rather than merely accepting them as an inviolable truth.

Initially Malcolm considered liaising with his governing body of sport, and discussing issues with top coaches nationally, but then it occurred to him that the UK had not really produced a top-class thrower for decades. Therefore, he set about compiling his own list of top international throwers, and who coached them; and at around this time he also experienced some good fortune in terms of emerging contacts and opportunities (or perhaps he was more primed to respond positively to them as they arose).

Via the Eastern Counties athlete development programme he was linked in with a renowned international discus coach, and then to Nigel Bevan, one of the UK's top throws coaches. Two years later he took over as regional throws coach, where Malcolm had another '*I can do this!*' moment when Nigel was unable to attend a training camp at the last minute, and he was thrown in at the deep end, successfully coaching a variety of international athletes off the cuff. Malcolm subsequently hooked up with Nigel again at Welsh development squad events, and then was introduced to Bill Tancred, one of the best UK throwers of all time, at an England Athletics development event. Malcolm additionally met an elite athlete turned coach called Vésteinn Hafsteinsson, and observed him coaching an Olympic Gold medallist, afterwards being provided with so much information that had to sit down and put it in some sort of order to be able to effectively take it all in. That encounter in turn led to a trip to Estonia, where Malcolm met the world record holder for the discus, and the German national coach, resulting in more invaluable coach education. All this represents a remarkable level of professional networking, with Malcolm engrossed in learning from others, and driven by a revitalised thirst for learning about high performance coaching.

Having also been asked to join a national coach mentoring scheme Malcolm was able to attend seminars delivered by specialist expert coaches, and touched base with many of the world's best throwers. This allowed him to not only increase his technical knowledge, but also put him in a position to be able to construct well thought out coaching programmes for international standard athletes. Furthermore, Malcolm gained an insight into the mental qualities that elite athletes require in order to be able to cope with the pressures of international competition, and, around this time, he

additionally undertook courses on strength and conditioning, gaining a Level 4 coaching award.

Thinking Differently

At this juncture Malcolm was beginning to reflect much more deeply on what constitutes a great thrower. He sensed that there was an over emphasis in the UK on gym based work, with, for instance, youngsters squatting excessive weights. In the process of analysing the techniques of many top throwers, Malcolm had also noted their physiques and athletic qualities, and it soon became clear to him that other attributes beyond just strength and bulk were required in his principle discipline of discus, but, these were rarely mentioned in seminars. For example, Malcolm had been in contact with an Australian coach, who had supported a toned athlete with muscle definition to become the youngest ever female world champion – but, paradoxically, this talented athlete was not what many people would have pictured as the ideal build for a discus thrower. Malcolm reflects that the thread of becoming aware has run throughout his life, and here his awareness was surfacing once more, resulting in a questioning of received wisdom.

The Australian coach informed Malcolm that he had gone through a similar process of considering what makes up a champion discus thrower, and had pinned down some of the attributes that emerged. He explained that at one point he decided to build a holistic team of expertise around that promising female athlete, since while he was a jack of all trades he was only a master of technique. It was an attempt to facilitate the development of a complete athlete, resulting in the formation of an interdisciplinary team covering everything from nutrition, to physiotherapy, massage, and biomechanics, with specialists chosen and coordinated by the head coach. What particularly fascinated Malcolm was one throwaway comment about the athlete being sent for one on one specialist gymnastics coach sessions once a week, with some work having been undertaken on the balance beam. Moreover, it seemed that the athlete complimented this gymnastics work with various single leg dynamic functional weights exercises, and jumps into held landing positions on one leg, as flexibility and balance were deemed to be significant contributions to her success.

This caused Malcolm to look at discus throwers in another way, critically assessing their balance and flexibility capabilities. With this in mind he reconsidered two exceptional UK discus throwers who had in their time been rare world class performers, and discovered that they had both been lean athletes, whose training had emphasised balance and flexibility, with only a limited amount of weights undertaken. Malcolm was now thinking outside of the box, and was compelled to ignore many coaching ideas prevalent in the UK, which made him wonder why nobody else had picked up on these points, and developed coaching in line with the needs of the sport, and what works in practice, rather than fixed assumptions without critical analysis.

At this stage Malcolm started to refine his own ideas about training, and the selection of athletes. It was clear to him that many emerging young discus throwers were not likely to taste success at top level, given that they had made it thus far principally based on a combination of extreme physical development, and the use of weights to build strength beyond natural levels. It seemed to him more probable that they would burn out, or quit, from such a lopsided and narrow development.

Reflecting on the Journey

And so Malcolm has steadily progressed over the years from a novice coach, to a national and international standard practitioner; but, there had been much learning (and a growing awareness) along the way, and it was apparent that there was more learning and work to be done. His own detective-like research continues to throw up new ideas and concepts to be investigated further, and, as a consequence, Malcolm often finds that he does things differently to the norm in his coaching. For instance, nowadays he includes some gymnastics work, and balance beam drills, in training programmes, although the athletes are initially apprehensive about such activity sometimes. Developmental directions in the future might include bringing in some element of ballet training for throwers, and becoming much better informed himself about the full implications of medical conditions in relation to the performances of some of his disabled athletes. Trying out new things in practice is thus a defining feature of his coach learning, in what one might term *doing as development*.

On reflection Malcolm would assert that he is a far better coach now than he was in the past, and has a much deeper understanding of how to coach effectively at a high standard. But, above all else, he appreciates that he still has a great deal to learn, and that there is much that he does not yet fully comprehend left to contemplate. One particular issue that he is now more aware of is whether he should be concentrating his coaching efforts on the talent that comes to him, which may or may not have the capabilities to ultimately reach international standard, or whether he should actively be seeking out more promising potential talent with certain requisite qualities to be honed. Another key question that he is concerned with is the extent to which gifted youngsters might be willing to be patient when they go through the growth spurt and many tend to lose strength, and then need to regain it later, meaning that they will need to have the mental strength to cope with the reality that throwing distances may temporarily be negatively impacted.

In coaching there will always be problems that need to be addressed, and questions that need to be answered, and Malcolm conveys the message that coaches must never forget that they must continue to learn, and interrogate what they are doing in practice, since he regards his own coaching odyssey as a never ending journey of gradual realisation. In this respect Malcolm has always been driven by an unquenchable thirst for learning, and although he asserts that it is thus hard to regress if you are constantly learning, he is troubled that a lack of access to certain learning resources could be a significant brake on his expertise. In Malcolm's view coach education is generally too passive and narrow, and should incorporate more facilitated networking between practitioners, and specific problem solving, with an individualised approach.

Throughout his developmental journey Malcolm has consistently questioned received wisdom, and tried to think differently. Thus, he has experimented with alternative approaches on a trial and error basis, and grappled with problem based learning scenarios. This may be seen in his championing of a more proactive approach to talent identification in field athletics, and in the integration of balance, flexibility, and gymnastics (and not just heavy weights) work in training programmes for throwers. He believes that you have to be unique as a coach, and that if you just go down the

established route then you will never create that magic that can set you, and your athletes, apart.

Learning from Others

Learning from others has been a continuous source of inspiration for Malcolm, sometimes due to happenstance, and sometimes as a result of his agency in seeking people out. For instance, his chance encounter with Eric Braun, and, thereby, mentoring in business, was the genesis of Malcolm coming to encourage athletes to think for themselves, and to be self-determined. Moreover, his attitude towards *doing as development*, meant that his own burgeoning coaching history progressively became a coaching resource that he could productively draw upon (in a reflection of his earlier self-reliance when an athlete). Nevertheless, as Malcolm took on more and more international coaching work, and an extended range of others came to learn from him, the balance of his portfolio of work was affected, and his expertise at national level became somewhat endangered, or out of kilter, at one point as a result.

Beyond those crucial encounters with key people, Malcolm also experienced some critical incidents on his developmental journey, usually featuring particular achievements of his athletes, the overcoming of specific problems encountered, or the breakdown or lack of compatibility of certain coach-athlete relationships. One unique challenge that stands out as absolutely testing Malcolm's coaching skills to the limit arose when one of his disabled athletes was reclassified at the last minute, leading to only a couple of days of training of throwing off of a brand new prosthetic leg prior to a major competition, at which the athlete nevertheless managed to transcend expectations.

Yet, because Malcolm thinks, and does things, differently, and often speaks his mind about matters, he can be seen by some as a controversial character. Consequently, he has his detractors (as well as his fans), and has on occasions found himself out of favour with, for example, particular governing body representatives. He states that he has questioned occasionally whether he wanted to continue coaching athletics, due to the micropolitics, and some of the characters he came up against in the early years of his coaching, who had a '*we know everything*' arrogance that was not consistent with

stifled UK thrower performance standards. In this sense expert status as a coach could be seen to be in the eye of the beholder, and a dilemma that Malcolm has faced is whether to ignore the micropolitics entirely versus potentially being side-lined from some opportunities. This he regards as the greatest single threat to his expertise.

Broad Reflections

Malcolm considers that participating in the current study has stimulated self-reflection, and provoked him to review and reconsider his own coaching approach, and his progression as a coach. Specifically, it made him think more deeply about his previous coaching achievements (supporting athletes to Olympic, Paralympic, and national team selection, and numerous titles), and caused him to question whether the standard of coaching he was providing to athletes during one particular period was truly acceptable. As a result of the latter he became somewhat revitalised in reconnecting with his personal coaching motivations, and reinvigorated in regards to ideas about how to strengthen and grow the sport which he coaches.

One long term project for him is to help understand athlete development better, and with his appetite whet for higher level learning, Malcolm has been recently accessing academic studies and research, and even contacting key authors (such as Professor Karl Ericsson), in order to comprehend theories in more depth, and to reinterpret and critique some dominant concepts in sports coaching which may actually lack an adequate, or appropriately scientific, basis for their current widespread applications (such as Long Term Athlete Development, and the ten thousand hour rule). Another future concern is overly simplistic strength and conditioning routines for throwing athletes, and the need to recognise the importance of developing ballistic strength (a subject on which Malcolm has an ambition to publish a paper).

Nevertheless, Malcolm now recognises that he has achieved many targets in his coaching, without always explicitly writing them down, or formally acknowledging them, and has generally kept expectations of athletes high, with their successes viewed not just as an end, but as a stepping stone to other things. While he is proud of the increased technical ability of the athletes in his charge, he puts more importance on their greater commitment to training and stretching themselves further, such that

he gains pleasure from those trying hard and reaching a better standard, not just from the highfliers. Malcolm believes we must all try to enjoy what we are doing, and fun is an important ingredient in success.

Fluctuations in Expertise

In relation to his own perceived coaching expertise, Malcolm's athletes have mostly been very successful, including the attainment of national, international, and world titles. Especially, the 2012 London Olympic and Paralympic Games period brought great recognition, enjoyment, and achievement. The knowledge gained was immense, as he networked and shared ideas with international coaches from many different sports. He also considers that this study has raised his perceptions of expertise, in that he might have considered himself to be seven or eight out of ten at the outset, but the writing of his own life history, and reflecting upon his athletes' achievements and the comments of athletes and other coaches, made him reassess that he was perhaps a nine in some respects.

During the last two years Malcolm believes that his coaching was solidly above average on the whole. However, he did suffer a period where his coaching was mundane, and his coaching behaviour was not good by his own standards. If he was honest with himself he realised that he was not performing well, and was going through the motions or merely coasting, in what could easily be a slump to three or four out of ten for perceived coaching expertise. He needed to be thinking more critically about the content of his coaching sessions, the amount of work he was investing in athlete development programmes, and further developing his own coaching knowledge. But, he found himself curiously demotivated by everyday coaching, which made up the vast majority of his work, and felt that he was letting the athletes down by not providing them with the support they needed at this crucial developmental time. Initially, he did not really know why this was – perhaps he was just bored, or going through a phase of taking a back seat? He thought seriously about whether he would continue to coach. And then he realised that much of his malaise was caused by political situations in the run up to the Olympics, revolving around the poaching of athletes by coaches, which provoked a questioning of whether it was actually worth all the time and energy one invested in coaching.

Having stated the above, Malcolm was also, at other points over the last two years, working hard, and delivering at high level, and being stretched in terms of his coaching knowledge, and the organisation of coaching sessions for various athletes and organisations, such that his motivation was at an all-time high. One highly respected coach even introduced him as one of the best throws coaches in the country, and wrote a letter to encourage him to keep doing a great job. In 2012 he spent a special year immersed in the Olympics, which was a high point in his coaching life, and a dream fulfilled to be working at such a major event, with great athletes and coaches from around the globe.

However, it also proved to be a very challenging and exhausting year, with Malcolm spending a great deal of time coaching at a very high level, acting as a support coach for overseas Olympic throwers, and concurrently looking after his own athletes. As a consequence, while the practical experience gained was immense, Malcolm had to shelve his own coach development plans. Nonetheless, one pinnacle moment during this year was Malcolm's appointment as Head Coach for the Haiti Paralympic team, whereby he was also asked to provide coach education, and input to other nations, stimulating his expertise to grow further (to self-perceptions of eight or nine out of ten).

Nevertheless, on the home front it seemed that Malcolm's expertise was less well appreciated, with a National Coach Mentor for throws directly questioning if he could adequately progress his coaching standards if Malcolm continued to coach both able bodied and disabled athletes, and a clique of other coaches associated with that mentor seeming to question his status as a coach. Just prior to 2012 Malcolm had been excluded from the national coach mentoring programme for questioning what he saw as some bad coaching practices, and not attending a particular event due to a family illness. So, at one and the same time he found himself to be one of the most experienced coaches in the country, with his ability recognised by international coaches and athletes, but deemed as being not worthy of being on a national programme, and regarded by some as merely lucky to have coached good athletes.

Despite the above imbalance and ambiguity, 2012 was Malcolm's biggest learning and development year in practical terms. However, 2013 came around without the chance

to catch his breath, and the intensity of his work was soon to catch up with him. Nevertheless, it proved to be a period of outstanding success for his athletes; and then in 2014 Malcolm had at least two athletes going to the World Junior Championships, one athlete placed on a British Athletics futures programme, and a further two going on to an academy programme (although once again Malcolm was not overly impressed with the way the programmes were run, or some of the ideas behind them).

Further Development

To develop his coaching further Malcolm believes it is crucial to continue his own education, finding out more about what makes athletes tick, how they can better support their own development, and what he can do himself to become a better coach. While the Olympic year was a great learning experience, it reinforced for Malcolm how important ongoing and continuing education was to his development. Notwithstanding, that coach education aspect remained at a low level during 2013 as he tried to recuperate from a very demanding previous year, which also led to his diabetes condition getting out of control. This resulted in an enforced period of relaxation, which included a couple of weeks of reenergising coaching of schoolchildren in sunnier climes, and a chance to reflect again upon his perceptions of expertise and standing in coaching. That sustained busy period of coaching pressure (including the Olympics and Paralympics) had led to an inevitable crash later, where his health was affected, which in turn temporarily manifested in a lack of focus, and being too laid back in his coaching approach, particularly with athletes he had worked with for a number of years. Thus, his perceived expertise had decreased when he was ill and exhausted, and Malcolm even considered whether he was going to continue as an athletics coach during his recuperation, although after reflection upon his learning and achievements his perceived expertise remained steady at eight or nine.

Towards the end of 2013 Malcolm was surprisingly offered some mentoring on a local athletics coach development programme, when perhaps he could have acted as a mentor himself. Nonetheless, having added his name to the scheme, he found himself suddenly invited again to national events and courses. However, he declined due to feeling a lack of confidence in the quality of local and national mentoring schemes. Once again this made him think that he needed to actively find and direct his own

education if he was to achieve the depth of learning he desired. Malcolm felt that the national governing body mentoring programme was more akin to simply training, and that the National Coach Mentor had never really attempted to properly mentor him when he was on the programme previously.

In Malcolm's opinion it is imperative that we open our minds to new ideas in order to give us a competitive edge, but at the same time we must not ignore our own history. For example, for him there should be less emphasis on personal best weights lifts for throws athletes, and more research on the importance of ballistic strength. Moreover, Malcolm is currently topping up knowledge to supplement his own experiences of the use of meditation, and motivational techniques, and investigating supporting disciplines in a deeper way (such as strength and conditioning, and psychology). Thus, he would assert that coaches must understand how to make use of the knowledge they already have, and make active efforts to supplement it further, as well as re-evaluating the tools we can productively use. He is currently updating on mentoring, coaching and training in their widest sense, disciplines which he first learnt about and encountered in industry.

Looking to the Future

Now in his early sixties Malcolm imagines that he might have another ten years of coaching left, dependent on health and financial constraints. His broad goal is to work with an even wider range of athletes, and to perhaps support them in a style akin to industrial mentoring/coaching/training. Malcolm wants to encourage athletes to use their own intelligence more fully, and to ensure that they are able to comprehend the process that they need to go through in order to make their ambitions a reality. He additionally hopes to potentially develop and design ballistic strength building machinery, in order to support training of throws athletes. As a former director of global companies Malcolm furthermore expresses a desire to return once more to the buzz of working in a multinational commercial environment, and an associated possibility is to develop a management consultancy to support growing enterprises through mentoring. Having previously travelled the world developing marketing schemes, and established friendships across the globe, he has a wealth of expertise to be called upon if required in this regard.

He retains an aspiration of wishing to contribute to the development of coach education in the UK – possibly establishing an academy to develop coaches, and to work with able bodied and disabled athletes in a totally inclusive way, but, cautions that this would require considerable investment, and the toleration of using both old and new concepts in harmony by those involved. He has thought long and hard about attempting to influence, or change, the style and content of current UK Athletics programmes, but feels there are too many people adhering to outdated methods at one extreme, and those who are university educated and wanting to impress with knowledge without really understanding that you have to evolve training programmes based on experience at the other. Malcolm would challenge the national governing body's ability to run a suitable highly developed responsive organisation, and to understand the needs and desires of participants, since many of those working for them have never reached high standards in sport. He appreciates that change can be very difficult, but believes that to develop sport, and the skills therein, you must be prepared to take a leap into the unknown, and make some radical changes.

There is still much that Malcolm wants to achieve and do in life, but with the financial situation in the UK he has to consider his options carefully. He would like to spend more time supporting and having fun with his grandchildren, so coaching may not take up such a large proportion of his life, and he will make changes to his coaching commitments to accommodate this. He also hopes to spend more time with family and friends, and listen to more live music. Nevertheless, he still wishes to give back to sport by promoting some of the enjoyment and skills he has been provided with by others over the years in football and athletics. Malcolm imagines that he will one day walk away from sport, after a big final scene where he tells a few people what he really thinks of them, but, he would not have chosen different avenues to follow, has enjoyed himself greatly on the journey, and gained a lovely extended family along the way.

Without several key individuals Malcolm insists that he would never have achieved so much, nor been so successful. Eric Braun, his first and greatest mentor, who believed in nurturing and helping others to develop the skills to support them through later life, was a major influence on Malcolm, and his death left an unfillable gap in his life. He was able to recognise the talents in others, and Malcolm still remembers him fondly,

and the support that he so freely gave. Eric Braun is why Malcolm believes in the power of what he would himself term 'proper mentoring'. Malcolm similarly considers that Nigel Bevan was pivotal in his own becoming as a high-quality coach, since he provided him with opportunities to take on big coaching jobs, and effectively buoyed his development and growth. Furthermore, he considers himself fortunate to have observed and worked alongside some of the world's best coaches, who generously gave their knowledge, and promoted his learning, on the winding path towards expertise. Although, inevitably, Malcolm would insist that, in the end, you have got to do things differently to everybody else, in order to be true to yourself.

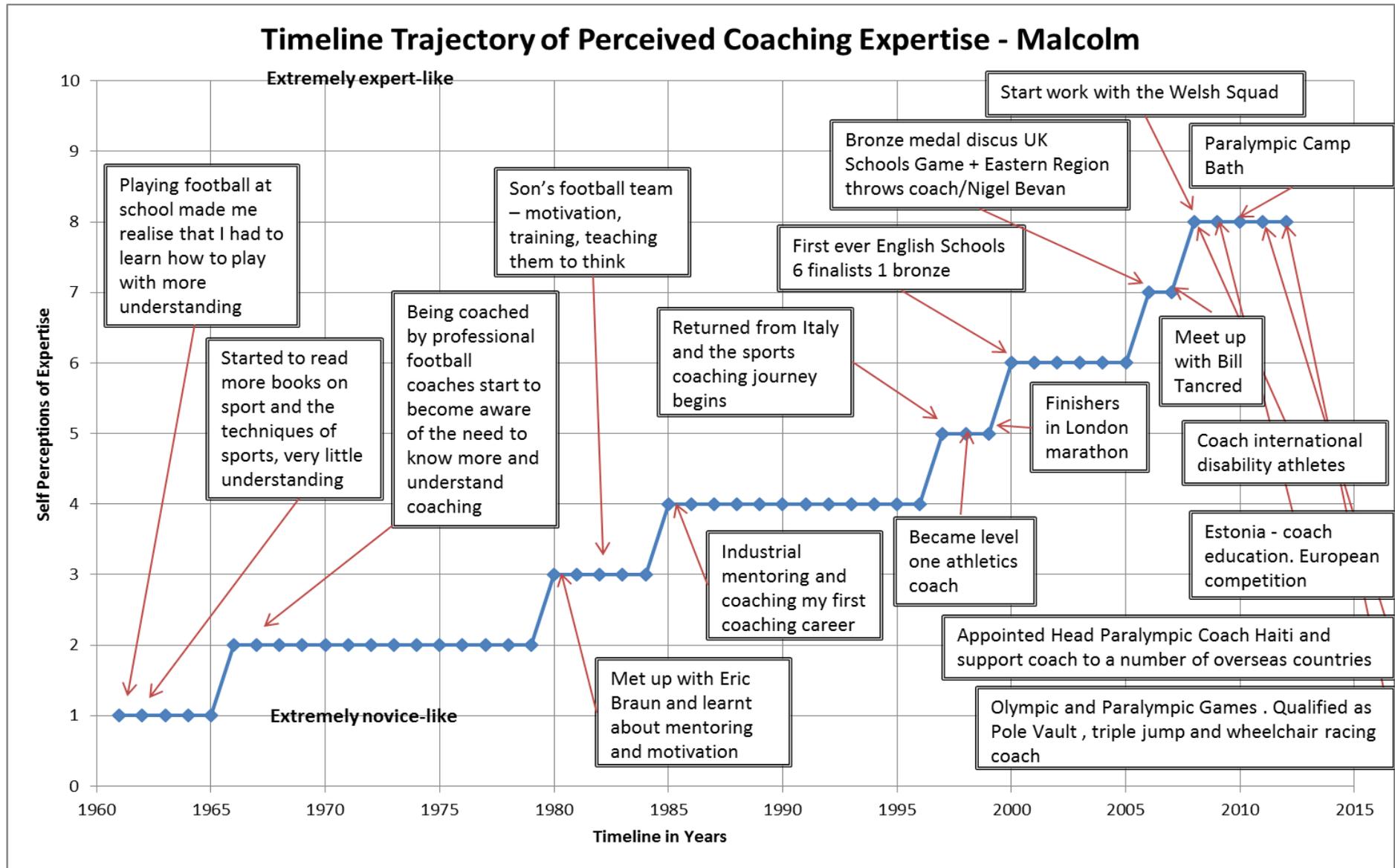


Figure 11. Timeline Trajectory of Perceived Coaching Expertise - Malcolm.

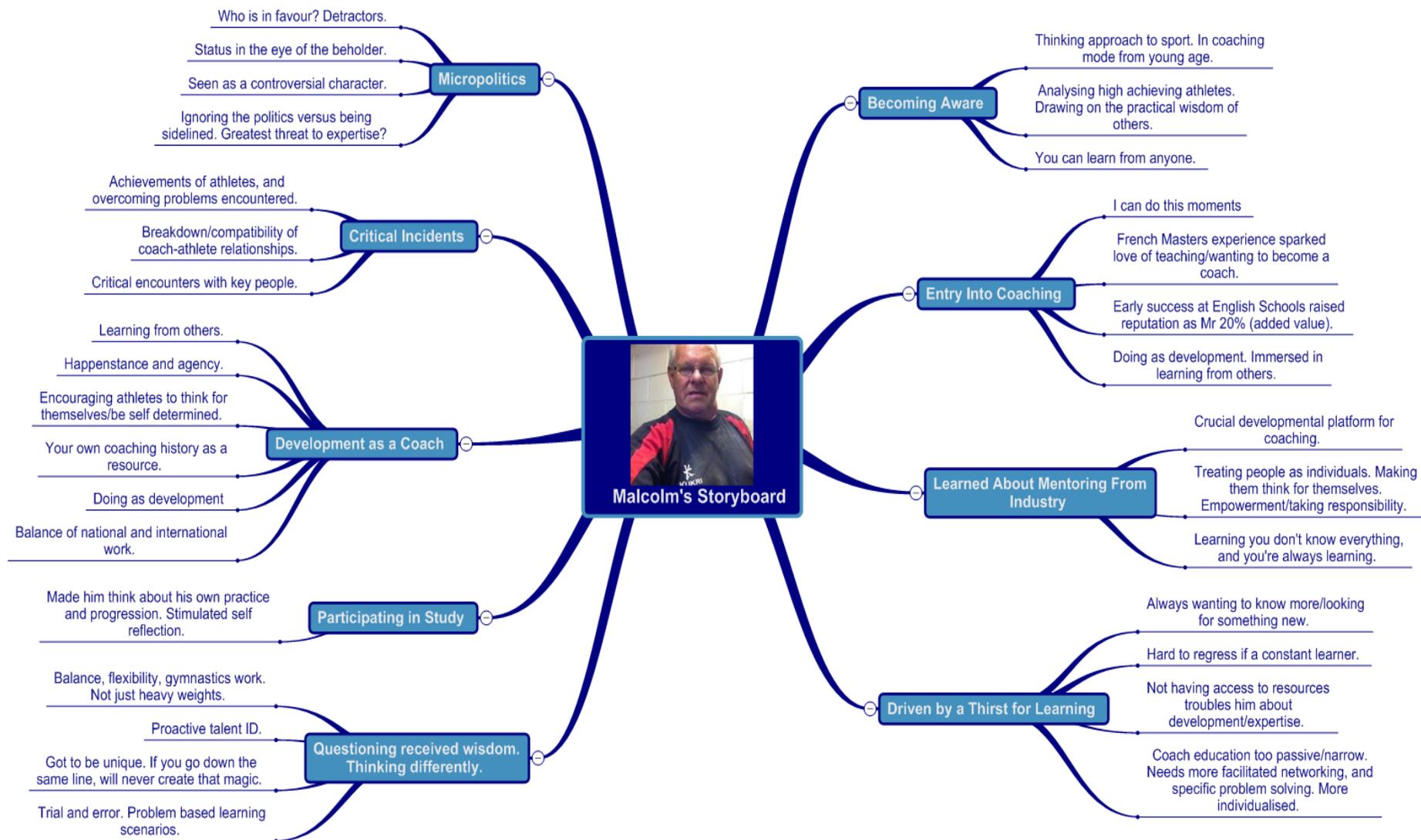


Figure 12. Storyboard for Malcolm.

4.4 William's Story: The Coach Who Came in From the Cold

Formative Influences

Whoosh! Young William takes a lusty flamboyant swipe of the bat, and sends the ball sailing over the boundary for another resounding six. He is new to the secondary school, and the cricket club practice sessions, but has spent long summers, and evenings after school, playing cricket with his friends in the park, and has inherited a love of the game arising from his Dad's passion for the dominant exciting West Indies cricket team of the era. In fact, his Dad first introduced him to coaching, providing tips, encouraging the investment of practice hours to hone his skills (from aged six), and helping him become familiar with the culture of West Indian cricket, by taking him to famous grounds to see legendary players, such as Gary Sobers.

William leans on his bat smiling, Viv Richards like, while fielders thrash about speculatively in the undergrowth to retrieve the ball. But, when he looks to the cricket teacher, umpiring at the other end, his smile is not returned. None of William's friends are in the squad, and his face just doesn't seem to fit well in the group, fuelling a sense of isolation. Even though he goes on to score many more runs off the school's best bowlers, and outshines them with his own medium-fast deliveries, his talents seem to go unrecognised... or at least not valued. Rather than offering any praise or encouragement the teacher asks him not to hit so hard, because they are wasting too much time searching for the ball.

When William finally gets his chance to represent the school in a competitive match he is given out to a very dubious LBW, after scoring only two runs, by the very same teacher from his own school. And there, sadly, William's first sporting love ended. Despite an accumulated history of playing cricket, and lofty ambitions to do so for his country, he switched off mentally, and never returned, although the experience still rankles somewhat even to this day. William is now acutely aware that for his own athletes there are pivotal points where they may either give up, or choose to battle on. However, this was not to be William's only uncomfortable sporting experience at secondary school.

Generally, he considered himself to be quite sporty, and accordingly featured in year group teams in several sports. But, despite athletic potential he felt that this was never developed or coached properly at school. For example, some raw speed gave him initial success in athletics, but he never received race strategy advice from the teachers who eventually deselected him. Similarly, in football, practice amounted to simply going out and playing a game. As a result William's school based sporting performances remained mediocre, although he continued to enjoy the social aspects. He was never the best at anything, and is left wondering how good he might have been at some things, if he had been better facilitated. Consequently, he now believes that an important part of the coach's job is to help realise athletes' hidden potential.

Nonetheless, developments outside of school started to take him in a different sporting direction. At age twelve he discovered by chance that one adult he played cricket with was a brown belt in Karate, who proceeded to demonstrate his ability to do press ups on his knuckles on concrete. Impressed by this feat, William and his brother ended up doing some weight-training with this man, who also revealed to them the secrets of progressively building up to successfully performing knuckle press-ups, as well as injecting a little basic Karate in their work outs. Actually, William was more interested in Kung Fu at the time, inspired by the iconic film star Bruce Lee, and planned to do gymnastics and ballet to promote the strength and fluidity of his movements before tackling this Chinese martial art. But when his brother's best friend's sister, who William admired from afar, revealed that she also did Karate, he realised that such a class was probably going to be as close as he might get to his martial ambitions.

So, they all started Karate classes together, in 1980, as teenagers. Everyone else soon dropped out, but William was absolutely hooked. The instructor was a fearsome autocratic coach, whose training was very military in style, with lots of punishment dished out. The early strength and conditioning work already undertaken came in very handy in this regard. Nevertheless, the intimidating coaching methods did have some merit, because standards were high, and provided a solid foundation for future development. However, William soon became frustrated by a lack of progress in this very traditional Karate setting. He longed to be able to spar, but was unable to do so

at this club until he attained brown belt status, a distant prospect given that gradings were on Sundays, when William's deeply religious family attended church together.

William joined a new club, where a school friend indicated there was regular sparring, and experienced a completely different motivational environment. There was friendly interaction between people before the class, the instructor smiled and welcomed him, and praised his bedroom honed sparring ability. Although the new instructor was not as young or physically able as the previous one, he demonstrated many positive coaching qualities. William thrived on the opportunity to grow and develop his skills, and his decision making was sharpened by the free style sparring. Allowed a bit more leeway to miss church as he grew older, he started to enter competitions, and began to regularly win medals. A few years of training later he was selected to fight for England at the Junior European Championships, opening up the chance to train with the renowned Ticky Donovan OBE, who had led Britain to three successive mens' team world titles.

The intensity of the national training camp was formidable, and at a level William was unaccustomed to. A one size fits all system, with demanding fitness work, designed to weed out the weak. During a line up, where William was required to fight the whole squad, one after the other, an unseen kick bust open his nose, and blood gushed down his top. Nonetheless, he was compelled to complete the remaining fights before cleaning himself up, consistent with a martial culture where ignoring pain and injury is often normalised. Afterwards William was told in no uncertain terms how useless he was by Ticky, and subjected to even more fitness work, but this only served to make him more determined to prove himself. Eventually, Ticky would use his ability to get the best out of fighters on the day, and as a master tactician, to coach William to European and World individual Golds, and numerous other international medals.

From Athlete to Coach

Up until this point William had only helped out occasionally at his club with informal coaching, but then he was asked to provide a sparring club for a handful of students who desired more experience of the sporting aspect of Karate (as his home club remained mostly traditionally based). With William still a young competitor, these

sessions were really more akin to a chance to train alongside him. His philosophies about what the content should be, and how it should be delivered, were influenced by early coaching experiences with his father, who was also a Pentecostal pastor leading a congregational flock, the life skills that had been taught to him by his family, and the (negative and positive) models provided by various school teachers and Karate instructors. Instinctively, he started to apply a holistic approach, with sessions being physically demanding, featuring technical content specific to sport Karate, and including work on mental preparation. At twenty-one, when he moved to Luton, William opened his own club (entitled *kaizen*, meaning constant improvement in Japanese); where he was keen to maintain his traditional roots, and encourage the parallel development of sport Karate. Over the following years he built up to more than a hundred members, coaching many to black belt, and producing national champions. At the same time his own international career was blossoming, and he became European champion.

In the meantime, William had outgrown his home club – or at least did not seem to fit in as well anymore. He asked his instructor if he could travel to London to do additional training with Vic Charles MBE, at his sport Karate club, which featured many impressive international fighters. At first this seemed to be no problem, but later William's instructor lined up the whole club and announced that the focus would now be more traditional, with no room for sport Karate. Whether the instructor felt he had taken William as far as he could (he now outperformed virtually all other members), or whether his ideas as an athlete did not match well enough with the instructor's own philosophies, is uncertain, but, regardless, William was advised to leave and join a more sport oriented club.

Vic Charles was a seven-time world champion, and winner of the TV show *Superstars*. He was a charismatic, single-minded, determined character, who was to become William's most influential coach. The transition was a smooth one, and William became part of the most successful Karate club team in British history, winning various national and international honours over a six-year period. Charles was an advocate of evidence based practice, and sports science, and in particular sports psychology. When he brought in pioneering early practitioners of Neuro Linguistic Programming (NLP) to

work with fighters, William started to adopt similar approaches with his own athletes, with some success (despite not yet being fully familiar with the 'why' behind such interventions).

By now William was himself a World Champion, and he took voluntary redundancy as a telecoms engineer, to be able to train full time. He established some more of his own clubs, and branched out into teaching self-defence to city business people for a while. But, gradually, priorities changed, and with a young family to support, William took to door supervising and security work. Nevertheless, with more experience of coaching, working as a self-defence instructor, and undertaking security courses, William further enhanced his coaching skills and knowledge. However, he was also growing older, and his career as a competitor was coming to an end.

On retiring from sport Karate, William felt a void inside, and found himself excluded from the international scene he was accustomed to. However, he could now focus more on coaching, and hoped that he would be asked to join the national coaching staff for Karate – but the call never came. Noting that they lacked a sports therapist on the team, William deliberately decided to cultivate these skills to make himself a more attractive prospect. He successfully gained an Advanced Diploma in Sports Therapy, and offered his services to the national governing body, but to no avail. At this time William was also studying further about fitness instruction, and it dawned on him that he still had much to learn.

This was a difficult period featuring a transition of identity for William, from having been a successful competitor as an athlete, to aspiring to become an elite coach, during which he felt that his coach development might be regressing (due to a lack of international opportunities), whilst simultaneously (because of his studies) he began to realise that there was so much more to coaching than he had appreciated. Ultimately, it took three or four years for William to unbecome a (potential) competitor, and make the conscious choice to fully commit to being a coach. To change from a mindset of wanting success for yourself, to desiring success for others, and to see things through a coach's, rather than a competitor's, eyes. It was during this stage that

he decided to go to university, as a mature student, to study for a degree in sports science.

As an experienced and successful coach, William found himself in the company of students who aspired to be where he already was. William worked his way steadily through the core units, but found himself particularly intrigued by the coaching modules, where he encountered myself, the narrator of this story. In contrast to some other rather monotone lecturers, William perceived that I had a passion for what I was delivering, and felt that he was almost being coached in these sessions. Although he was not the most academically accomplished student, William embraced the theoretical ideas, which started to help him make greater sense of what he was doing in his coaching, and informed other possible interventions.

William experienced a sense of embarrassment and inadequacy as it became apparent to him just how much he did not yet know, but he kindly states that I inspired him to develop his coaching abilities further, and, while he ultimately only completed two years of the degree programme, he describes this experience as profound for his development, provoking a more evidence based approach to coaching. Furthermore, we established a coach mentoring relationship that has continued to the present day, and as part of that rapport, when William needed some practical coaching reviewed and confirmed by an external specialist as part of the coaching module requirements, I suggested sending a video to one of the assistant England coaches, to see if it might also help open some doors.

Subsequently, in 2005 William was called upon by Ticky Donovan to become the Midlands regional coach, and assistant national coach. While, in the former role, William coached the team to a European Bronze medal, in the latter capacity, an overzealous approach, and strong personal beliefs about the right way to coach, soon led to clashes with Ticky. William found himself swiftly side-lined into a minor role as Performance Manager, in which he designed a reformist performance plan for the sport, although that too failed to convince the old guard, and he was stonewalled, and sacked from that post as well within six months. Although he managed to successfully reapply for the regional coaching position, William essentially found himself politically

isolated, and out of the loop again internationally. He presented his sports plan unsuccessfully to the governing body on three further occasions, and undertook two failed attempts to become the national coach, in an attritional game of patience.

In the meantime, three of William's own athletes emerged to become established top rated fighters for England, as a result of his holistic progressive coaching approach. To be clear, these coaching qualities are part of what William understands an expert coach has to be – that is, to recognise a diversity of pivotal influences and critical events potentially impacting upon athletic performance, and to constantly develop and innovate as a coach in response to an evolving game. To artfully deal with the demands of the game itself, and also to take into account enlightening scientific breakthroughs.

National Coach

William finally became the national Karate coach in 2011, at the third attempt. However, it had been a hard dispiriting ride getting there, and he had only applied once more due to the encouragement of other coaches. Consequently, the energy expended in actually securing the post made it difficult to generate the necessary enthusiasm when he was first actually appointed to the job. Nevertheless, he recovered quickly and made his presence felt, promoting a process over product approach, for instance, introducing a regional Karate structure, and implementing a systematic selection procedure. These changes were not without their problems and critics, but the sport was now not doing the same old things, so they were not expecting the same old results. Sure enough performance outcomes began to confirm the rightness of his direction, and within a year of appointment English Karate had two Junior World Champions, and two European Bronze medallists.

At the same time, although it took a while to establish himself, William became comfortable coaching both to, and at, international level, such that he felt he could help bring out the best in people no matter what the coaching situation. Thus, despite describing a sense of isolation and vulnerability in an engagement with a constantly changing game that demands continuous learning to promote success, William also reports feeling relaxed in the midst of chaos, as he came to know what the issues were

in this context, and to be able to think on the spot, in responding to athlete needs, and developing trust.

William experienced what he terms an *aloneness* in his position as national coach, with nobody to push him except himself, and his guiding beliefs about what he thought was right. Though this was offset by a valued support team of assistant coaches (providing feedback, expressing alternative opinions, and questioning his thinking), ultimately the full weight of responsibility was William's, fuelling a sense of vulnerability. Nonetheless, William considered it was important for his assistant coaches to be able to make mistakes and grow from them, essentially taking the burden of accountability himself so that others were free to coach and learn.

Part of William's vision as national coach was to develop young athletes through building competitive opportunities to experience surviving at elite levels, with a de-emphasis on winning. One specific aim was to get athletes into the top sixteen in the world, supported by William's networking that opened up more chances for his athletes to compete in various competitions, his evidence based coaching support (from both science and personal experiences), and an ongoing exploration of what was really working at tournaments to guide the rightness of their direction. For William championships are always a powerful part of learning, cultivating an intuitive feel for what the best are doing, and what is required to perform well at the highest level, informed by videos of fights and fighters, and performance feedback, such that preparation is not merely based on guesswork.

Generally, William adopted a reformist approach, going beyond the expected role, and challenging accepted ways of doing things. For instance, he introduced the use of NLP with athletes, worked against the tactic of fighting merely in straight lines, designed a specific playbook of progressive drills and competences, emphasised footwork patterns, introduced scenario based training, compiled normative data for Karate athletes, and established performance indicators for competitions. But, coming in from the outside with new thinking also led to William encountering some conflict and suspicion, such that he was compelled to learn how to play micropolitical games.

When he first became national coach he found himself unexpectedly preoccupied and distracted by the politics that go with the game – resistance to his ideas from elements of the old regime, selection issues, power concerns with Captains, stubborn adherence to old school training methods. Most disturbingly William was often challenged and frustrated while attempting to establish processes and systems to support performance development, and felt that his own expertise was instead being overly judged in terms of end products (such as medal hauls). Gradually he came to know the territory better, and what could, and could not, realistically be controlled. Hence he began to involve Board members more fully in decision making matters, and was careful not to be too overpowering in regards to implementing new initiatives. He resigned himself to accepting that dealing with micropolitics is part of the job, but simultaneously resolved that it should be used to our advantage when we are able to do so. Thus, William set about cultivating cultural ambassadors to help spread the key messages of the new culture, and began targeting where best to invest his finite coaching energy in terms of likely engagement and returns. This led to the ruthless deselection of some established fighters, and the increased bleeding⁴⁴ of promising youth.

Closely connected with micropolitics in William's experiences was the issue of impression management. Being the national coach put him firmly in the spotlight, where he was acutely aware that his actions and reactions were inevitably under constant scrutiny, requiring great personal discipline in the heat of battle. William realised he was unceasingly being judged by different people on different things depending upon their own perspectives and agendas. In that sense one might state that expertise was in the eye of the beholder. William's response was partly to become a chameleon, playing the coaching role that was needed in order to work to dissimilar athlete expectations, and travelling around the regions to coach workshops, where he deliberately raised his game in order to look impressive.

During his time as national coach William felt his own perceptions of expertise rise, fall, and rise again, largely because changing the performance Karate culture proved

⁴⁴ That is, early selection and exposure to competitive pressures in tournament environments.

far harder than anticipated. Nevertheless, over time it seems that his approach was vindicated. In 2013 a well prepared junior European Championship squad competed in a manner consistent with the desired resolute style of the new order apparent, with over half of the fighters achieving top seven European rankings. A year later the juniors did even better, providing clear evidence that William's strategies were working, and convincing him of the rightness of his coaching direction. Concurrently the Board started to be more supportive of his selection initiatives, William became more adept at dealing with micropolitical issues as they arose, and team spirit in a streamlined select senior squad was lifted by a promotional video prior to the 2014 European Championships, all leading to unanticipated success for fighters which exceeded expectations at this competition. In particular the first Gold Medal for England Karate for fourteen years was highly significant. The fighter was William's son and student, validating his coaching methods and strategies as the way forward, and crowning his proudest period in his coaching career to date.

Reflections and the Future

At this point William's perceptions of his own coaching expertise were at an all-time high. He felt that his coaching approach had matured over the last few years, and although that familiar sense of vulnerability remained in the background, he had a greater clarity in terms of where he was going – and a relief from the burden of having to constantly justify the rightness of his direction. By 2015, consistent with William's aforementioned aims England had three fighters ranked in the top sixteen in the world. But, just as he appeared to be finding a rhythm it seemed that the rug might be pulled out from under him. William's coaching-work balance was becoming steadily more strained, and his leave to attend international championships was in danger of being revoked by his employers. Keen to continue his coaching journey William set about exploring alternative sources of finance or employment should he be forced to make a choice. He certainly does not envisage his coach development journey coming to an abrupt halt any time soon, but, in the longer term, implicates a steady release of pressure on the accelerator, and a gradual application of the brakes.

In regard to critical incidents during his coaching journey William would assert that problem solving is an integral part of the nature of the coaching task, and while he

actively seeks new ways of promoting performance results, that, sometimes, you cannot affect things as much as you might like to. Nonetheless, he maintains that everything that has happened to him in relation to coaching needed to happen to bring him to where he is now. For example, he recounts one painful incident when he was coaching as an assistant at his first international tournament with the England team, having been out of the game for some time, where he found himself uncomfortably out of his depth, and felt he choked⁴⁵, when trying to coach a fighter in a pressure cooker repeat of a recent World Championship final. But his reaction to this episode was to draw positive messages from failure, and resolve to be more prepared in future, and never to let that sort of thing happen to him again. Interestingly, critical encounters have also been highly important on his developmental journey - the cricket teacher who shattered his love of cricket, the Karate coach who allowed him to spar, a Karate seminar with international coach educator Antonio Seba on scenario based training that partly confirmed the rightness of his own direction, and spurred his coach development forwards.

Despite all this William considers himself unfinished, and that he personally still has a way to go. He believes that his own coach development has featured a generally upward, but smoothly undulating developmental trajectory. He regards it as a constant progression, whereby he will never be ten out of ten, but might get near if he attains some more world class results. As an analogy to hill walking he feels that being at or near the summit is gratifying, but the journey to get there is arduous and sapping, involving diverse challenging terrains, and false summits, where you seem to make a breakthrough, when it turns out that there is much farther to go. The downward curves of his trajectory, or the downhill detours on the ascent, might be represented by when he was out of the loop on the international scene, or out of favour with the Karate governing body, or, perhaps, when he was still seeing coaching through the eyes of a competitor.

William especially values his agency in planning his own continuing professional development, and controlling the direction and content of his learning. Hence, he has

⁴⁵ A sporting term commonly applied to the phenomenon of folding or imploding when under pressure.

recently undertaken courses in Olympic lifting to better support the strength and conditioning of his athletes, and has completed a teacher training programme in order to elevate his pedagogical practices in coaching. In the future he envisages his coach development journey evolving academically, with the intention of completing a Masters degree in sports coaching, which he hopes will enhance the quality of his own coaching, and potentially prepare him for a future role in coach education. William's attitude to CPD is *the more I learn the less I know*, displaying a healthy humility.

In connection with this William believes that ongoing support for expert coaches should consist of exposure to cutting edge ideas and technologies, the sharing of problem coaching scenarios with other practitioners, and involve efforts to help take them out of their comfort zones. In regard to his own development William asserts that if he does not progress as a coach then he is falling behind in the game. In some respects then he is motivated to succeed by failure, and, consequently, if somebody expresses that he cannot do something it tends to spur him on. He is also of the opinion that he has demonstrated persistence, commitment, and resilience in coming to know how to use both positive and negative experiences in order to sculpt the coaching journey; but retains a fear of the consequences of being too strong willed, and going down the wrong path as a result.

William's long-term ambitions encompass potentially becoming a performance director for Karate, and increasing communication with club coaches nationwide in order to cultivate a more holistic approach to preparing athletes through training programmes (not only physically, but also technically, tactically, and emotionally). Furthermore, he has become interested in coach educating nationally and internationally in Karate, after attending an inspiring World Karate Federation coach development seminar. Recently, William applied for a coach education post for the governing body of another martial art which has Olympic status. Over time William has perceived an inexorable shift in the emphasis of his coaching expertise away from personal physical abilities, and towards coaching know how, as he has become more experienced and older. Thus, the physicality of Karate, and issues of credibility may require a slowdown in his coaching journey, or at least a slight change of direction towards performance director or coach educator roles. It is also likely that in a martial art based activity there will

always be succession issues, with young guns inevitably emerging to assert claims, and potentially usurp the crown of national coach.

In terms of legacy William has had his criticisms as national coach, but more praise of late, and would like to be remembered as the person who turned England Karate around, inspired excellence, and challenged existing ways of doing things. He hopes that his story will reinforce the importance of personal and academic development for coaches, as who we are will inevitably reflect, and impact upon, our coaching practices. For now, William continues to coach with tenacity, zeal, and the will to win – as much a champion competitor as he ever was in terms of intrinsic determination to be the best. In his journey he was often the outsider, or the reformer, and was frequently frustrated and alienated as a result, but he has fought his way to the top in Karate coaching, and positively affected the performance culture along the way.

He senses that a crucial aspect of coaching is maintaining a balance. What he describes as keeping that homeostasis⁴⁶ between everything. For him the greatest threat to his expertise is in getting that balance wrong. For instance, he currently feels uneasy about whether he has insufficient time to plan adequately for the diversity of athletes under his charge, and would be more effective and happy with the quality of coaching support if he was full time. During the course of this study Karate failed to gain Olympic status, which would have made this more likely. At one particular point during this study, William experienced a particularly difficult period of personal pressure that led to his life being temporarily in a state of crisis, manifesting in him starting to act out of character, and lose equilibrium. However, he recovered swiftly and is now more reflexive and accomplished in balancing work, family and Karate.

William has expressed that taking part in this study has been a privilege, which has had a significant impact upon his coaching approach. Firstly, it has proved valuable in being prompted to generally think more deeply, and with more sharpened clarity. Secondly, it has particularly helped him to understand himself better, in bringing self-perceptions closer to how and who he actually is. At points during the study William

⁴⁶ Meaning to attempt to maintain a stable state in dynamically changing circumstances. I develop further on the analogy of this term for sports coaching in the Chapter 5.

did not seem to recognise himself as he perceived himself to be, and the project allowed him to actively work on adjustments in order to bring his exhibited self a little closer to his self-perceptions. In essence the study helped him to look back at himself from a more detached perspective, and, therefore, to reassess the trustworthiness of his self-perceptions. Thirdly, the processes outlined above raised certain matters to a level of conscious awareness so that they could be used as deliberate coaching strategies. In a similar vein William did not previously fully appreciate how certain occurrences had sculpted and moulded his coaching career. Finally, however, William also considers that in all the ups and downs of his coach learning journey the one constant has been to some extent his own identity – that is, he has become, and is, successful as a coach, because of who, and what, he is as a person. That is, coaching is intimately wrapped up with who you are yourself.

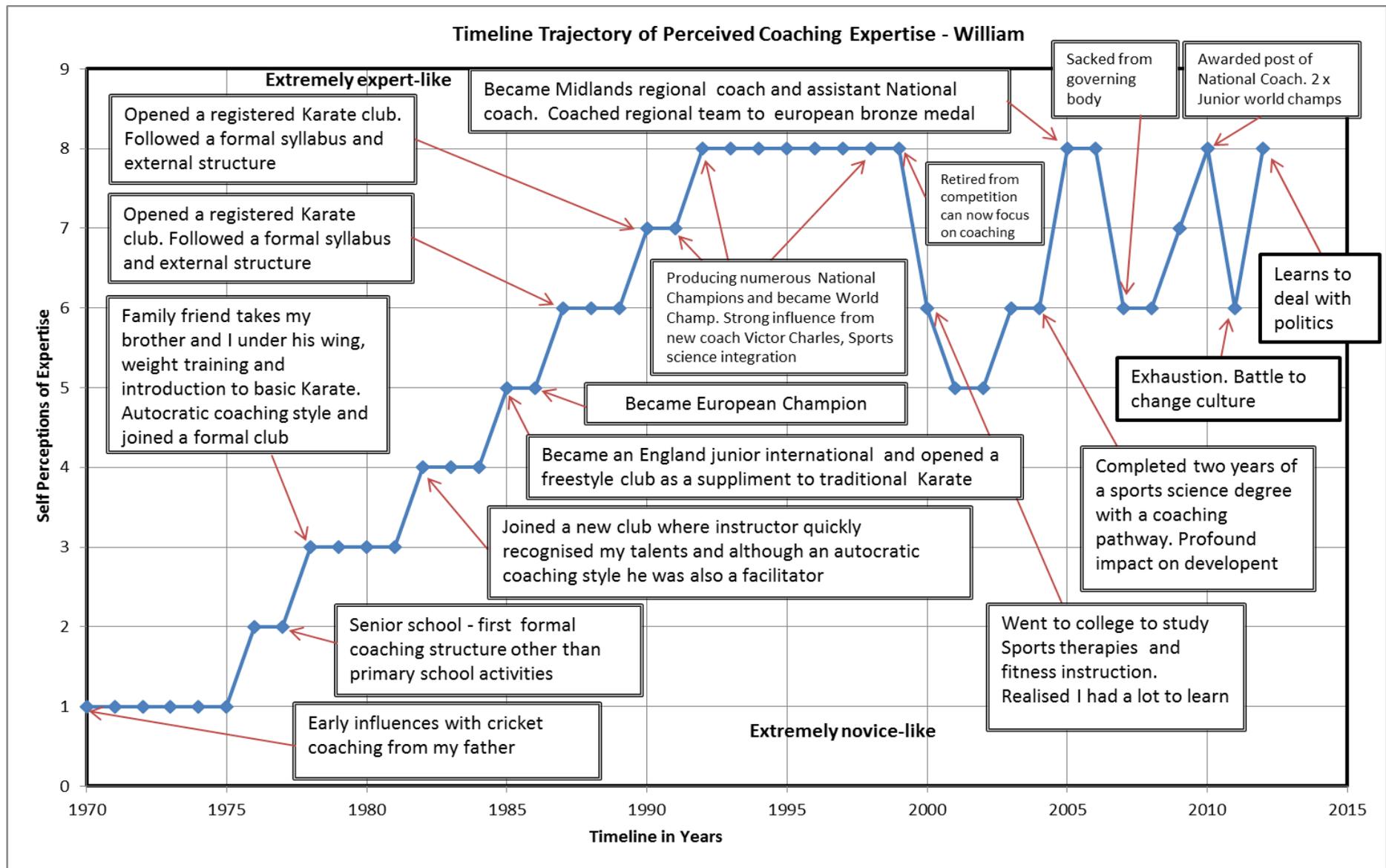


Figure 13. Timeline Trajectory of Perceived Expertise - William.

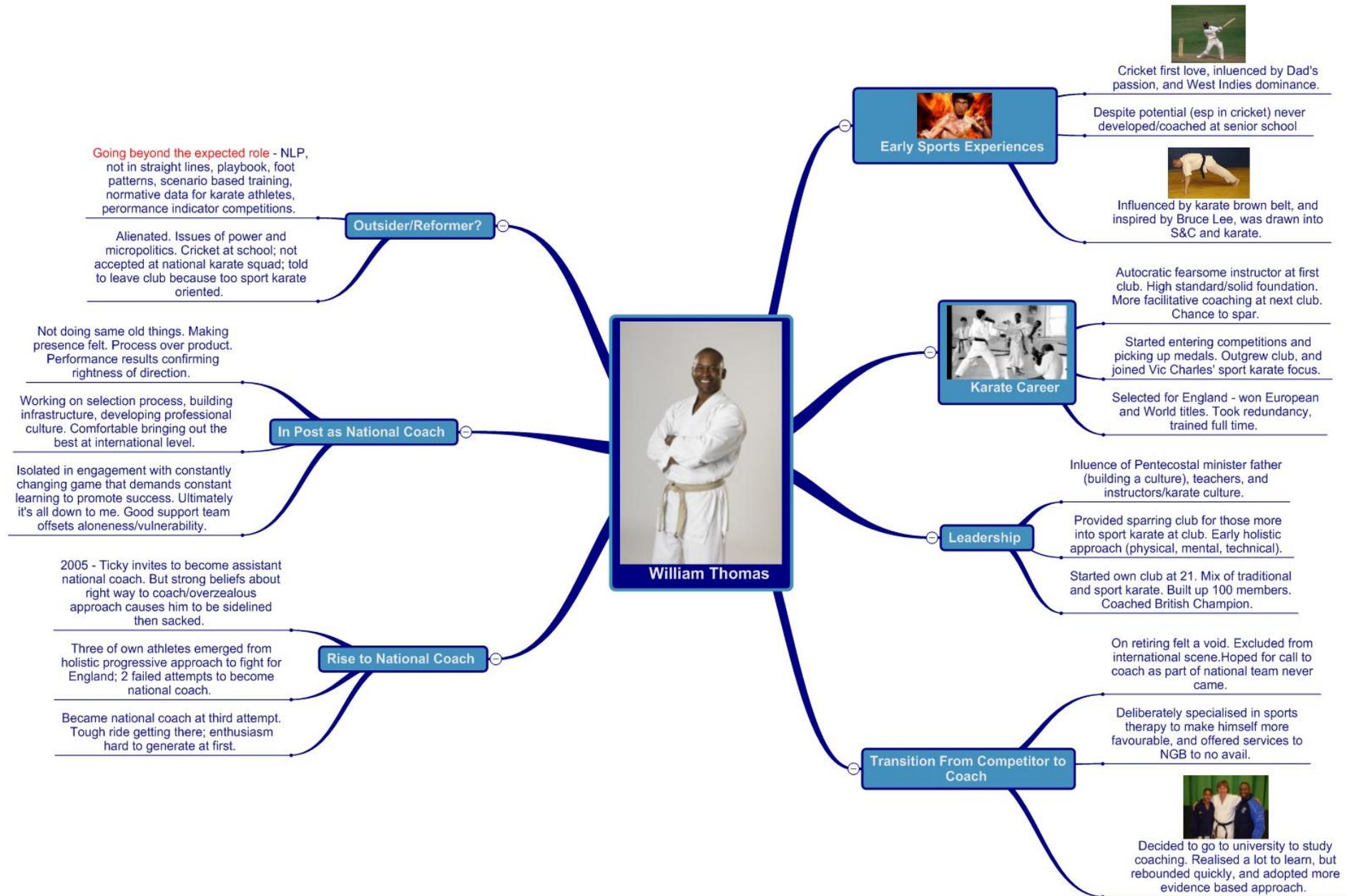


Figure 14. Part One of Storyboard for William.

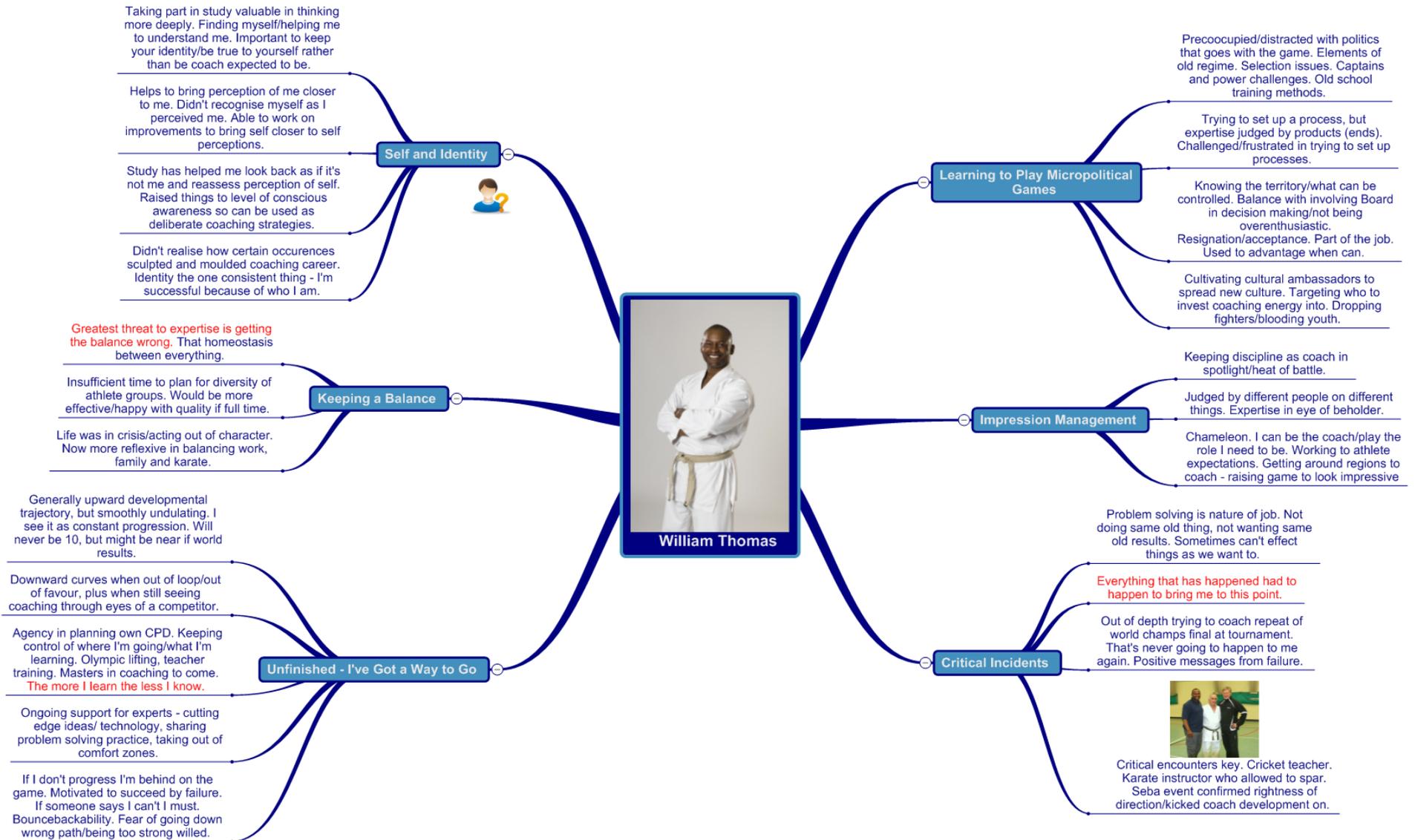


Figure 15. Part Two of Storyboard for William.

4.5 Sam's Story: A Tale of Becoming and Unbecoming Across Coaching Cultures

Becoming a Footballer?

Sam's relationship with sport had an unpromising start. As a youngster he was generally uninterested and uncoordinated in regards to physical activity, although he did attend an after school tennis club, organised by a coach called Heather, possibly due to the cultural transmission of his parents' interest in the game. Sam recalls having played with his parents in the garden, and already had a new racquet to show off, indicating that tennis might have had some nascent meaning and value to him. However, it was to be another sport that initially captured his imagination. When a friend needed to practice his shots in the garden Sam was introduced to football, and specifically goalkeeping.

He soon became immersed and personally invested in the sport, playing at every opportunity, and experiencing a life changing transformation in becoming a footballer. With much committed work, and full support from his parents for his development, Sam enjoyed a wonderful period of growth as a competitor, teammate, and an eager embracer of challenges, and he values this turning point in his life to this day. At this stage Sam was still casually playing tennis for an hour or two per week, as a side interest.

Then a critical incident occurred that was to have a powerful tacit influence upon Sam, and would prove to be a foundational catalyst for his coaching journey. Sam excitedly received some specialised goalkeeping assistance from an older semi-professional player, and the input caused him to subliminally take on certain training values and adopt an altered work ethic, provoking his own accelerated development⁴⁷. Whether it was as a consequence of the above, or simply a ploy to be involved in football for a few more hours a week, fifteen-year-old Sam nervously offered his services to the

⁴⁷ It is interesting to note that Sam was largely unaware of the significance of this early formative experience until exploring his own coaching life history as part of the current study.

manager of his club in helping younger goalkeepers. In doing so Sam sensed that he was offering something that was not currently being catered for.

Sam soon found himself assisting at training sessions and matches, although, frustratingly, over a year or so of involvement, his role remained largely restricted to pre-match warm ups, such that he was exposed to an overly simplistic view of coaching. Moreover, while Sam enjoyed supporting the adult coaches, he quickly found himself questioning the received wisdom of the coaching methods employed, which often seemed ill-advised, sometimes to the point of lunacy. He was left with the strong impression that the young goalkeepers were being short changed developmentally, both in terms of the quality of coaching, and his own underutilisation. This combined with an increased involvement at Linslade Tennis Club (LTC) provoked a shift in the context of his coaching interests.

Alongside now playing football at paid semi-professional standard, Sam became Junior Captain at LTC (attending committee meetings, and helping organise small competitions), and also assisted the (above-mentioned) Club Coach, Heather, with sessions for younger players. He discovered a sense of enjoyment, and also started hitting with young players at parents' requests. It began to dawn on Sam that coaching could be a positive focus for him moving forwards, and this stirred a desire to increase his understanding in the area. As a result Sam was stimulated to make remarkable early progress in tennis coaching awards, achieving a Level 2 before he was seventeen, and booking onto a Level 3 that commenced just a week after his eighteenth birthday.

In 2000 Sam was invited to attend a Bedfordshire LTA fitness testing day, and while his on-court performance as a somewhat limited player was unexceptional, he outperformed all of the current county players in a battery of fitness tests, bringing him to the attention of the County Performance Coach, Matt Willcocks. This proved to be a significant encounter that led to a plethora of later growth provoking opportunities, beginning with the offer of a tennis coaching gap year after Sam's A Levels. Contemporaneously, Sam's enjoyment of football declined, and his involvement gradually tailed off. Despite being reasonably talented and successful, he did not really

feel a comfortable part of the scene anymore, and it all did not seem worth the effort invested, so that football now represented a lack of fit culturally for him. But just as one dream faded, another was emerging and being strengthened – to become a tennis coach.

Becoming a Tennis Coach!

During his gap year Sam was exposed by Matt to a rich variety of grass roots tennis coaching experiences (such as organising fun days, supporting tournaments, and working in schools and parks). Sam remains truly grateful for the support, guidance, and challenge he received from working alongside Matt during this period, leading to much learning and achievement. In particular Sam was able to observe (and question) others, learn about theory (from courses, books and research), and benefit from diverse experiences. In regard to the latter he recalls great learning for the future from sink or swim situations, encompassing a feeling of discomfort when a coaching skill or requirement is deficient, and then a numbing of that sensation as you progress towards competence, and, eventually, confident enjoyment, as the skill is rehearsed and becomes well developed. While he was not fully aware of it at the time, Sam, guided by Matt, developed as a coach, and as a person, in terms of a number of skill sets, and across a range of contexts.

However, at this juncture Sam realised that performance coaching was the context he relished most, and which offered the greatest scope for a more professionalised coaching role, in direct contrast to the voluntary approach from his football coaching experiences. Sam eagerly set about learning the tricks of the trade of supporting tennis performance. One day, following a session with the mental skills coach at Gosling Academy, Sam was advised to undertake a practitioner course in Neuro-Linguistic Programming (NLP). This led to a sensitised shift in awareness of his outlook on life, and our potential control over behaviours.

Essentially, NLP informs us that we may be empowered to take more ownership over certain outcomes, which can lead to change, more control, and an enhanced likelihood of success. From this perspective cause and effect is a continuum of ownership; with those at the effect extreme simply accepting what happens to them, in an attitude of

powerlessness, and recurrently coming to play the victim; while those at the cause end take responsibility for what happens to them, and as a consequence gain greater control over their destinies. Sam's practitioner training impacted deeply upon his coaching philosophy, whereby the concept of empowerment came to be at its core (for instance, encouraging the independence of youngsters on the court in order to promote winning outcomes). Furthermore, Sam came to adopt a process focus in his coaching work – emphasising the matters that need to be attended to in order to develop confidence, and ultimately to win, rather than concentrating on winning itself, and, thereby, being more susceptible to performance related distractions and fears.

Prior to Sam's gap year, he had applied, and been rejected on more than one occasion, to study a coach education degree at University of Bath. Undeterred, he applied once more, emphasising his desire for coaching and further learning, and was given a conditional offer. Sam considers that determination is an important asset for coach and personal development, and one of his key qualities (he also believes that resilience is crucial for bouncing back from difficulties). Generally it helps you to get what you want, and demonstrates to others that you are prepared to do what it takes to make things happen. Specifically, in this instance, it put Sam in a position to meet some accomplished lecturers, and two especially who would have a profound influence on his coaching journey.

Ant Bush provided valuable insights into how personality, and a shared understanding of values, could help to get the best out of people. He also informed, and ably demonstrated, how to deal with some of the ambiguities inherent in coaching, such as, using humour to emphasise points while retaining control of the environment, employing and applying intelligence but in a comprehensible manner, and making complex information as simple as possible. Morph Bowes was a master coach and pedagogue, seemingly familiar with the theory behind every coaching practice decision he made. Moreover, he was a passionate coach who proposed that the art of coaching was to have a solid appreciation of mind, and then to ask questions about crucial issues that will lead the athlete to improved performance. This added a more sophisticated and nuanced understanding of coaching to Sam's repertoire.

One critical incident at university occurred during a practical coaching assessment, when Morph was observing, and Sam was coaching a group he worked with each week. Sam's session had a clear central theme, and a predetermined method designed to progressively lead the athletes towards a clearer self-discovered appreciation of how to perform effectively within the chosen tactical situation. However, the lead coach of the programme came over and decided to step in, steadily just revealing all the answers, and simply telling the athletes what to do.

While this was beyond Sam's control, and made a mockery of his plans, it did remain his assessment. Morph, sensing Sam's disappointment, asked a series of facilitative questions, that allowed Sam to express his own ideas about what he would have needed to do in order to show his ability as a coach, and allowed him to critique the approach of the head coach. In this way Sam was still able to score a high first for the assessment. This made him realise that just when he was ready to give up on the outcome, due to an outside influence impairing his performance, the coach⁴⁸ (Morph) skilfully asked questions which led to a solution that improved the end product. For Sam the incident reinforced that he needed to develop his facilitative questioning skills further to be of full service to his clients in regards to problem solving.

The degree experience was a time of rapid progress for Sam, with stimulated thinking, and experimental applied coaching being mutually enriching; although Sam made his own fortune here somewhat, in that while the programme was not greatly applied in nature, he undertook practical coaching projects alongside it, and a tennis based placement year as well. Sports coaching was beginning to be a large and significant part of Sam's life, and this also caused him to broaden his research into neighbouring fields. As an illustration, Sam has a keen interest in psychology, and has completed a postgraduate award, which has sharpened his understanding of the minds of athletes that he works with. Furthermore, in discussions with his brother, who is an occupational psychologist and business coach, Sam came to appreciate that his mastered coaching skills are potentially transferable to other sports and disciplines. Nevertheless, in his part time role as a lecturer in sports coaching in recent years, Sam

⁴⁸ It is interesting to note that three of Sam's most influential role models or mentors (Ant, Morph, and Matt) all acted, in his own words, as coaches, in their supportive approaches.

has observed that many of the undergraduates do not have confidence in their ability to coach other disciplines, which prompted him to try to develop others by espousing to them his own philosophies and beliefs developed as a coach. He believes that if young people can grasp the versatility of their coaching skills, then it will strengthen their understanding that it is just these sort of skills (rather than say merely playing ability) that will have the greatest positive impact upon those they work with. To that end Sam has recently established a business through which he can satisfy this social need, and hopefully play an important role in the future development of coaches.

In regard to Sam's own coach development of late, this is positively impacted by the environment within which he now works, Gosling International High Performance Centre (GIHPC), and the interdisciplinary performance coaching team which he is part of. Indeed, Sam considers that the team is both world class, and unique. With strong leadership from (previously mentioned mentor) Matt Willcocks, the team coordinates the many duties that are required to operate a successful and sustainable tennis centre and academy. Open and honest communication (however difficult it might be at times) is encouraged, and an ethos is embraced by all individuals that *to stop learning is to fall behind the best*. Sam is ever thankful for this rich social learning environment, and its contribution to his evolving understanding, and the provision of challenging experiences that he has had support in overcoming, and growing from. Effectively GIHPC is a hot house for the further development of Sam's coach learning.

In this working environment Sam has learnt that one can coach someone more experienced, talented, or skilled than yourself, if you know how to listen well, and respond skilfully with provoking and well-intentioned questions. That is, it is possible to draw upon (or draw out) the knowledge of others in order to find an improved solution (a lesson originally learned from Morph, and worked upon since). Experiences such as these fuel Sam's certainty that mastered coaching skills are a skill set fit for a broader purpose in life.

At GIHPC Sam has been able to refine his process over product coaching approach, seeking a deeper understanding of the outcomes required to become a successful tennis player, and what goes in to making that happen, and doing less to achieve

more, by deliberately facilitating, rather than simply instructing, athletes. In doing so he has grown more aware of his own frustrations when faced with a lack of athlete progress, and become more receptive to trying something different, and critically considering whether athletes are ready to be accountable for their own learning, while simultaneously committing to striving to enforce excellence standards. Sam now firmly adheres to a belief in improvement not just talent, manifested, for instance, in holistic athlete and coach development plans, detailing what to work on in order to maximise gains, and incorporating tailored personal accountability.

At the time of our last meeting Sam was at an unusually low ebb. GIHPC had implemented a new team policy on player development, which provided clear guidelines on what sort of training standards were required of players, in order for them to be realistically supported towards certain levels, hence, ensuring a better return on investment in producing professional players. But this rational change triggered substantial unrest, and Sam, acting as a gatekeeper for the scheme, had numerous difficult discussions with emotionally charged parents. In fact he describes how, for the first time in his life he was mentally drained, and had reached his limits. Interestingly, during these confrontations Sam declares that his expertise had to be much higher than his usual perception of around six out of ten. In fact he states that it had to be near ten at these testing times, in order to resolutely defend the team's stated position, and to show no weakness in relation to their shared beliefs; although he also indicated that it temporarily dropped below six when he reflected later upon *how* the situation might have been handled, if not *what* was actually being appropriately addressed.

Going through these frequent fluctuations in perceived expertise, with several reflective cycles in quick succession, and experiencing much conflict in a short period, proved exhausting, and provided Sam with an insight into how some coaches might suffer from burnout, or become disillusioned altogether. Although he possessed the coping strategies and skills to survive, one of which was to reconnect with his on-court coaching to remind himself what it is really all about beyond broader process management issues, Sam learned three important lessons. Firstly, that your own wellbeing ought to remain at the forefront of your priorities. Secondly, that helping others by sharing your story is important (Sam found our last interview a welcome

release from the pressure he was under), and something he would like to continue in future. Thirdly, that you should choose carefully who you work with, and who you invest part of yourself in. To this end Sam aspires to be the first in the world to select and profile players *and* their parents using psychometric tools, although he may need to more fully familiarise himself with these altered parameters of expertise first.

As coaches would we prefer to work with a group of children whose parents are pessimistic and blaming, have scant drive to improve things, and perceive they have limited control over their futures; or a group whose parents love to solve problems, are content and empowered in their working roles, face problems head on, and are able to deal with adversity? The latter parents will have the motivation to change in order to support performance improvement, and will actively seek help, because they are optimistic, lifelong learners, and challenge seekers, who strive to control the future. Children are, of course, a product of their parents, and we ought to realise as a result that our time and effort could conceivably be better spent with those who are most likely to productively apply and benefit from our advice.

Becoming Something Different Again?

For Sam a new passion is surfacing - to grow a business, taking his knowledge from tennis coaching into developing broader resources for goal achievement and personal development. Sam wishes to draw upon what he has learnt from sport, in order to inspire others, and encourage a different way of looking at things, within the business domain, as he sees many shared features and parallels across the two. What is more Sam believes that it might even be easier to promote quick measureable results in business (compared to elite youth tennis) in terms of improved work performance, although he is additionally excited by the prospect of making a genuine difference to the individual in this context. Furthermore, this avenue could well prove to be lucrative; indicating possibly that coaching at present does not adequately pay the bills, even for this expert-like coach, in a relatively affluent sport.

As a consequence of the above Sam has undertaken some deliberate moves towards his new found aspirations. He has modified his own aforementioned company's structure, and won a human resources consultancy contract abroad, whereby he can

start to apply his psychometric learnings in writing personnel reports. Sam regards this as a potential springboard into the business world. Of late Sam also attended an event featuring an expert who teaches others how to get paid being an expert in anything. This has sparked an interest in motivational speaking, and a belief that Sam could in the future fulfil such a role, despite the fact that at heart he describes himself as an introvert.

Reflections on Coaching, Development, and Expertise

At present Sam's view is that he works at GIHPC in a learning and development playground environment that is about as perfect as it can realistically be. He is supported, encouraged to be great, and to constantly strive to become even better. As such he feels that it continues to make him a better coach, colleague, and person each day. This all seems like a happy ending. But, Sam also indicates that if he were no longer a part of this enriching team, then he would no longer be working in tennis. When life inevitably throws change at him, and if for some reason the team were to sadly end tomorrow, what would Sam do then? The loss of him to tennis coaching, and of the positive impact he could make on other athletes and coaches, would seem to be a tragedy – or would he simply take those mastered skill sets to another related domain? What might he possibly do in the future in order to develop himself, and other coaches, further? Perhaps bring together and lead his own high performance interdisciplinary coaching team, and become the next (but different) Matt? No doubt Sam's NLP training would encourage him to be (or at least to attempt to envision) the change he might like to (or need to) see in the world, with that positive solution focused eye of his shaping alternative happy endings.

Sam perceives coaching as a never-ending process of constant improvement, always exploring better ways to do things. Looking back on his journey it is apparent that at one crucial point tennis seemed to offer a better cultural fit than football for Sam's burgeoning coaching ambitions. Hence, that impressive early progress on tennis coaching awards, although these days Sam values other awareness raising courses, and continuing professional development opportunities, far more highly. As Sam progressed to coaching higher level tennis players, he started to develop a reputation as a problem solver, and began in turn to help to coordinate and develop other

coaches. Furthermore, Sam benefited greatly from collaborating with a wider team of likeminded experts, while always appreciating that valuable accumulated knowledge is never enough in itself, because the game is always changing. But, perhaps more importantly, along the way, he learned to love the job.

Sam also experienced critical catalytic encounters with highly influential persons who changed the journey, in what might be termed interpersonal turning points. For instance, Matt raised Sam's awareness of whether players are problem or solution focused in their approach, and whether they are truly willing to pay the price for excellence, two issues that Sam has tried long and hard to grapple with ever since. Intriguingly, Sam wonders if he might subconsciously have been open to such external influences from mentors; that is, if he was, below the level of full awareness, seeking opportunities to fill a void, or to learn more deeply.

Similarly, Sam came upon important concepts on his journey, such as NLP, which promoted a change in himself and his coaching practice, through a sensitised awareness of less productive behaviours. As a consequence Sam became more growth focused and athlete centred, helping players to develop character and independence, and strengthening his personal conviction that the athletes can find out for themselves if asked the right questions.

Sam is open to the notion that his coaching identity will be moulded and evolve as a result of his coaching and life experiences, such as being a member of that world class coaching team at GIHPC, and being exposed to the challenges of working with elite players. Nonetheless, coaching has become a large and enriching part of his life, and a way of being. In this regard Sam sees expansion into related areas such as psychology, lecturing in coach education, and business, as a natural consequence of his own holistic development, and curiosity.

Sam believes that it is only natural that coaching expertise will fluctuate (especially moment to moment), but that his own coach development trajectory has been inexorably upwards, if undulating. Fascinatingly, Sam asserts that, along the way, as you encounter new people, or experiences, the scale of how good a coach could be

tends to expand. Thus, although Sam would certainly consider that he has improved as a coach over the years, he would only score himself as consistently around six out of ten for perceived coaching expertise across most of the last decade, as his conception of what coaching potentially is constantly grows. In this perspective coaching will always throw up new challenges, and is perhaps unknowable in terms of its complete scope, and Sam recommends that coaches should thus *be comfortable with the unexpected*. That is, by being prepared (through remaining positive and open) to encounter the unexpected as a potential learning resource. In this way surfing the turbulence of the coach learning journey could be reconceived as being an integral part of the enjoyment of the coaching challenge.

Here we touch upon the sensitive balance between confidence and complacency inherent in coaching, necessitating a striving for something akin to homeostasis. In this vein Sam asserts that the most dangerous time in coaching is when you think you have done a good job. Likewise, he believes that you cannot be complacent about coach development, although you will never be perfect. For him the coach must be receptive to new ideas and further learning, or they will be vulnerable to the delusion of unawareness. In Sam's experience coaching can be confidence eroding when you get stuck in trying to solve a particular problem, or become too fixed in a particular mindset. He has tried to address this by accepting shortcomings as an opportunity to work on something, and by actively choosing not to take things too personally.

One specific long term ongoing challenge that Sam has faced is the matter of how a good tennis parent should behave in order to best support their child's development. He has worked hard over an extended period of time to try to help parents to appreciate their role as significant others in the coaching process, and to understand that they are part of the athlete's coaching team, by promoting effective interconnections, and periodising, or contextualising, expectations.

But, Sam has also experienced more frequent short term developmental cycles, going on almost all of the time, whereby you work your way through some matter, ending up back where you were, but with an unsettling of old beliefs, or a reformation of ideas. Sometimes this has brought him to penny dropping moments, when he has realised

that he has been looking at something interesting to the extent that he has lost sight of the basics. Nevertheless, there is no discovery without exploration, and generally these are positive cycles, where you tend to add things to the basics once you refocus.

Sam has also found it useful to have anchor points, or stakes in the ground, as a framework for dealing with the uncertainty of coaching, and somewhat controlling the game. That is, getting a handle on what might be most important, or significant, in regard to the improvement of players, and what most needs attending to in the coaching process. These factors, once selected, may then be quantified to some extent, and required performance standards can be established. While the determination of these anchor points will undoubtedly be influenced by Sam's own philosophy of coaching, it is also likely to provide factual information to supplement his own thoughts and intuitions, and, moreover, to build trust in justifying his ideas to players. Indeed, Sam indicates that this can also become a bespoke process, in determining which anchor points mean something to the player too.

Let us briefly turn to some of Sam's thoughts on expertise in coaching. Firstly, Sam claims that knowing well your own values and beliefs helps coaches to be more stable in the midst of an uncertain game, and that this is a crucial factor for expert coaches in specifically helping them to cope with the constantly moving boundaries of coach-athlete relationships. Secondly, Sam thinks that those who desire to be, and remain experts, need to go beyond qualifications, to embrace an internal desire to always get better, and find out more. In the light of this he recommends that coaches create their own *dissatisfaction*; meaning that rather than being told what they need to know, they should be able to articulate to others what they need to know. Finally, Sam asserts that experts require tailored support, for instance, working on real world situations, in their own way, with compatible mentors. However, it is also incumbent upon these experts that, in so doing, they should be open to moving out of their comfort zones, and being challenged, such that part of the support for expert coaches should be commensurate with their own attitude to lifelong learning. As Sam has stated, a good coach will always find ways to develop their coaching.

Although the coaching journey might one day end for Sam in terms of his title or role, he is not convinced it ever really could do so in relation to his coaching nature. He hopes that his legacy is manifested in the independence developed by those he has impacted, which might in turn hopefully be passed on to others through time. The journey could always have been different, with key decisions leading to alternative choices and possibilities, but, Sam believes that the paths we create are paths behind us, not predetermined paths ahead for us to walk, and has faith that he has become enriched because of the many chances he has taken, and openings he has grasped or generated. In this way he would endorse that those aspiring to expertise should remain inquisitive and alert to opportunities - to do something novel, meet someone new, experience a different event or viewpoint – because doing something unfamiliar enables serendipitous developmental encounters and learning episodes.

For those in the early stages of their journey he offers two pieces of advice – know where you want to head, and then make decisions which allow for more choices for the next part of the journey; and surround yourself with only quality people. Being part of this study has taught Sam that we are who we are largely because of the people around us, who help to make us who we are, and he advises it is vital to acknowledge the impact of those who support and shape you, who push you on to think about and examine your practice. We have seen in this story how precious support and guidance from several significant others along the way has helped Sam to become the coach he now is, and, touchingly, he also recognises the process of being a participant in this study as having had a positive bearing, in that it caused him to write up and consider his journey (where it started, how it was boosted, and by whom), and has helped to inspire certain aspects of his coaching, learning, and development. Most of all he expresses a debt of gratitude to his parents for early on deeply instilling a desire to know more – to experience, to explore, to understand. At the core of a successful person is a willingness to extend themselves, to discover something about themselves as yet unknown, and in so doing to possibly become someone and something altered for the better.⁴⁹

⁴⁹ Sam innovatively redesigned/reconceived of the timeline trajectory task that follows, in order to reflect his distinct lack of awareness of coaching early on, and an expanding awareness of what coaching is, or could be, as he progressed further in his journey. Thus, while he progresses towards expertise, his perceived expertise nonetheless remains at around six out of ten.

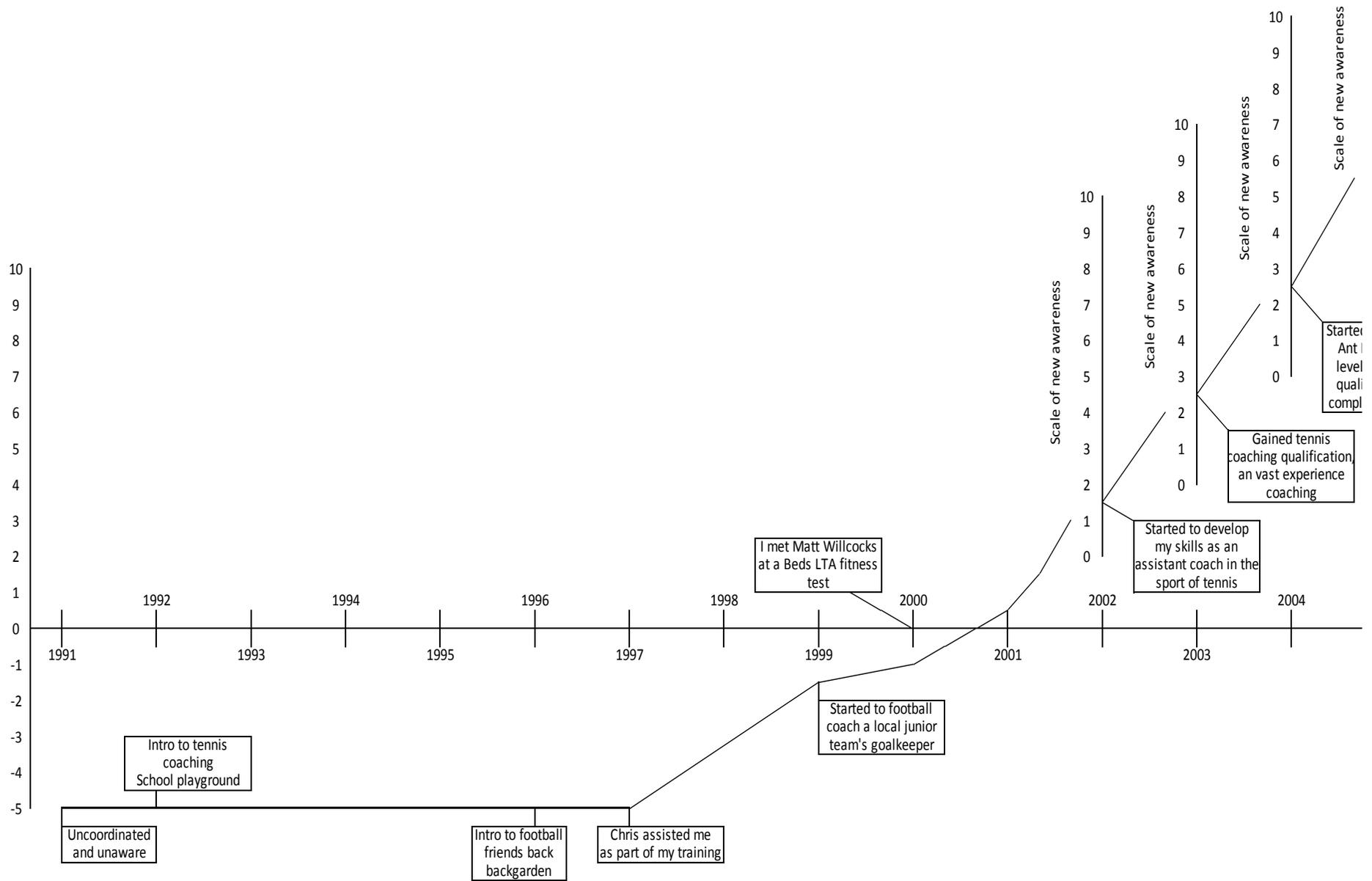


Figure 17. Part One of Expanded View of Timeline Trajectory - Sam.

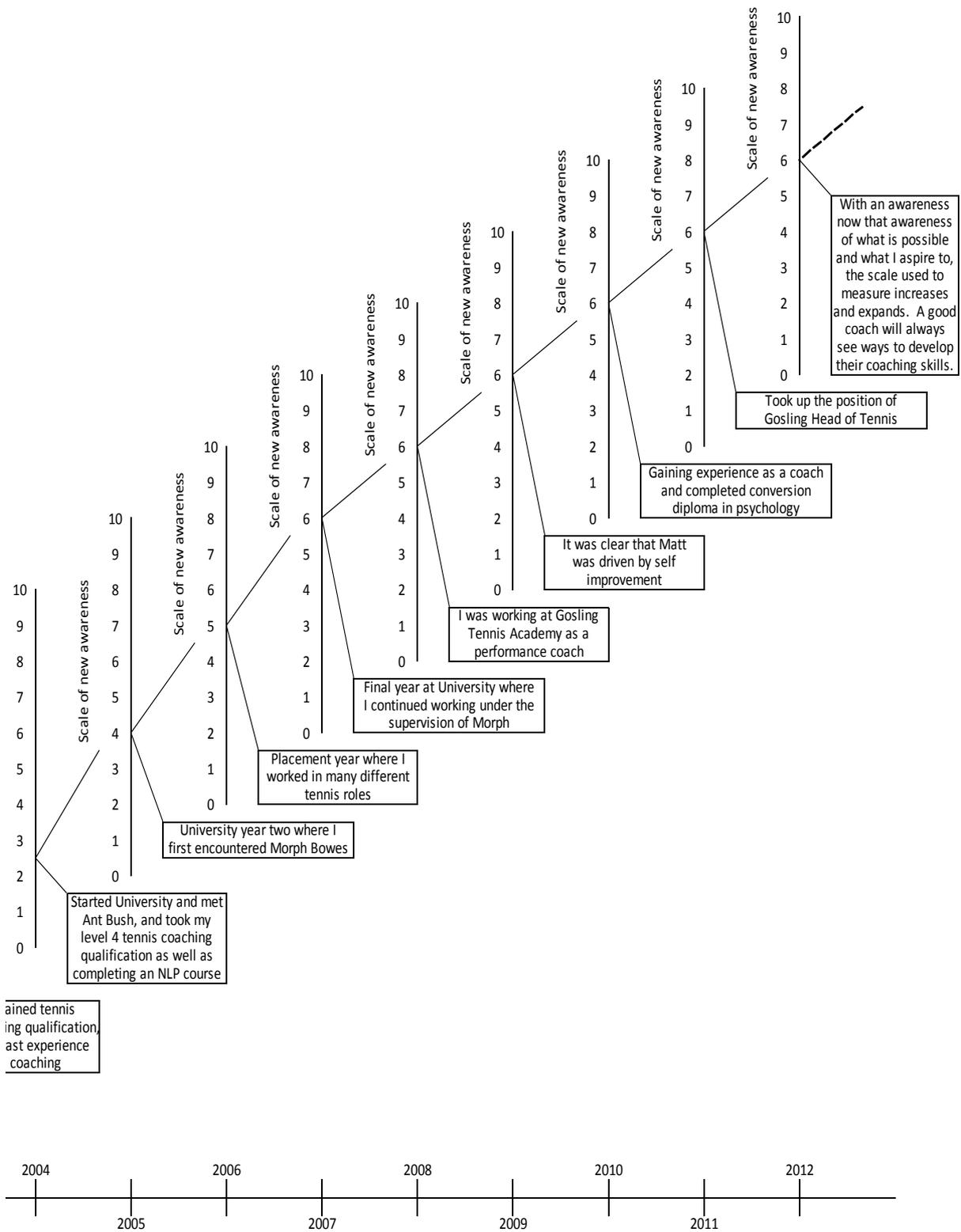


Figure 18. Part Two of Expanded View of Timeline Trajectory - Sam.

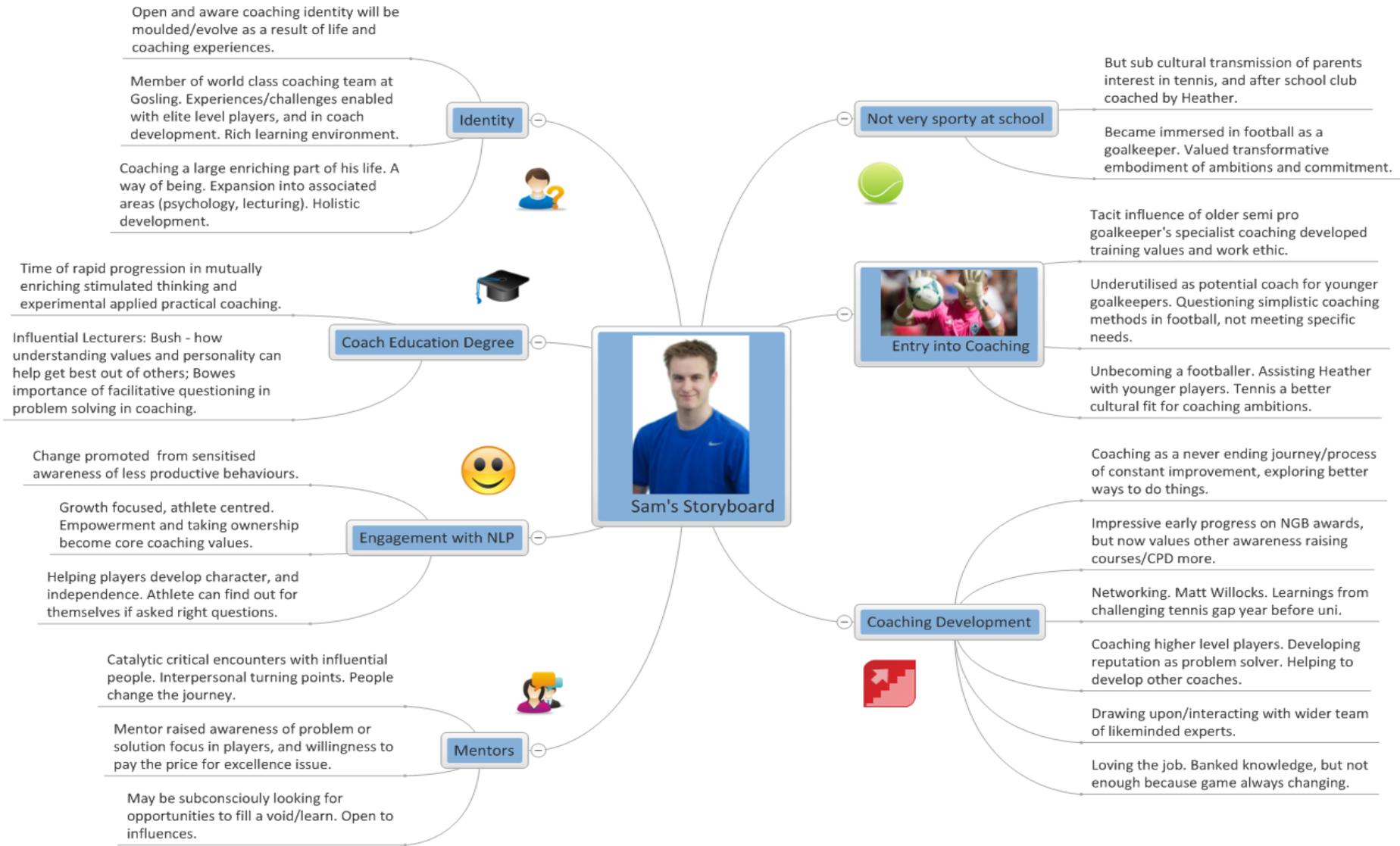


Figure 19. Part One of Storyboard for Sam.

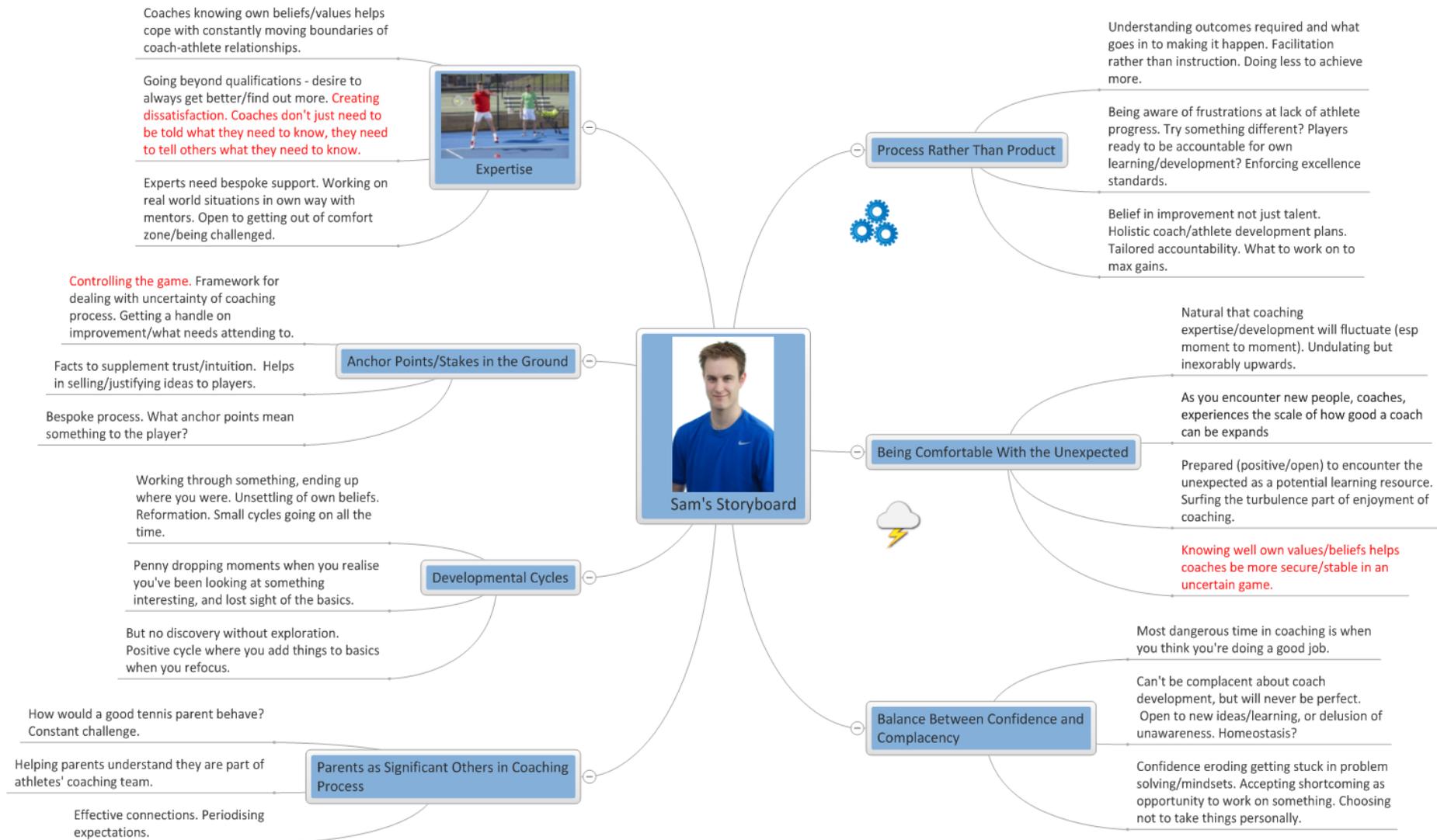


Figure 20. Part Two of Storyboard for Sam.

Reflexive Interlude 4 - My Recent Coaching Development and Looking to the Future

In the last two years my perceived coaching expertise has unexpectedly risen from around six out of ten, to in the region of eight out of ten. In a postscript to my initial life history I indicated that I was subsequently invited, at the start of 2012, to guest coach a boys' U15 football team, in the village where I live, on a monthly Masterclass basis. Other coaches observed my sessions, assisted, and discussed content with me afterwards. This proved to be a really pleasurable coach education setting, a welcome revisited challenge (I had not coached this age group for twenty years, and had to deliberately adapt my approach to get positive results), and helped to keep me in touch with practical applied coaching, after a period of controlled decline in my perceived expertise, given that my role as a Principal Lecturer within HE, while it has led me to become stronger theoretically, precludes my engaging with hands on coaching roles.

It was so refreshing and renovating to have a new practical coaching project that I could effectively fit in with my busy schedule. I felt myself easing back into a familiar role, and sensed that I was reconnecting with a neglected part of my self. In short, it was greatly enjoyable to be reengaged with the challenge of coaching – and it was a considerable challenge! Some of the better players were the most unruly and selfish, and would often over elaborate on the ball, at the expense of team play, and the development of the lesser players. I soon became involved in planning for behaviour management, and my work with the football club smoothly started to morph into that of a coaching consultant (for instance, advising the manager/other coaches on codes of conduct, and how to deal with unwanted behaviours on match days).

There was an interesting critical incident during my first coaching session. Part way through I remember thinking to myself, hold on a minute, you are struggling a bit here! It was then that I realised I had not coached teenagers for twenty years. It came as something of a shock that my well-honed coaching skills were not standing me in good enough stead in this subtly altered context. I may have only rated myself as 6 out of 10 for coaching expertise during this period, but it never even occurred to me that the session I was delivering would be anything less than excellent. Actually the players

and other coaches thought it was fine, but I was a bit shaken, and realised I had a task on my hands. This spurred me into action, and I planned much more meticulously, and with greater reflective consideration. Two or three sessions later, and I had it sorted. The session was pleasingly effective and exciting, and it was to be the beginning of my main influence upon the team.

Results started improving, and players abilities started to blossom. For the first season I just maintained the occasional session, but I soon started to attend some home matches, and was surprised at how much influence I was able to have on performance (I have always been a coach who thinks that most of the real work is done in training), and how well received my input was from organisers, parents and players alike. I felt myself being inexorably more drawn into this coaching project. By the start of the following pre-season I was involved in a lot of planning, regular sessions, and advising. All of the poorly behaving players had left and gone to a local rival team, leaving us with a group of very pleasant young men, keen to learn, but with a distinct lack of individual talent. I set about building a team culture – establishing with the players our stated values during pre-season, and how we might demonstrate them in our behaviours, and implementing a daring new tactical formation.

Initially we went backwards. The results of pre-season friendly matches were horrendous. We could not score, and were conceding goals at an alarming rate. For a while there I had to question if I was making things better or worse. My perceptions of expertise certainly became depressed at this point. However, the team started the season with a best ever three straight wins, before we settled into comfortable mid table form. Another interesting critical incident was when we had a serious mid-season wobble, and I had to help the players identify what the problem was (it turned out to be one of commitment from some players), and how to address it (we started selecting/substituting players based on commitment, and monitored performance with a view to who we would intend to invite back the next year). This successful problem solving exercise boosted my own perceptions of expertise, and was a turning point for the team. The season ended with a home victory over the local rivals that our ex-players had joined, which secured for the football club its very first season with more

games won than lost. It was very satisfying, and the culmination of a coaching project that had proved far more rewarding and engaging than I had anticipated.

Sadly the club struggled to recruit enough players for the start of the following season, with many beginning to work, and having heavy educational commitments, and, thus, I find myself once again without a practical coaching project (and the old problem of it being difficult to fit anything in to my very busy schedule). Already I feel that my perceived expertise has declined as a result (I am probably back at around seven). Looking ahead I cannot see myself finding something that will fit in (although there is a local semi-professional football club that I could possibly get involved with), and I would envisage perhaps not practically coaching in the next three years while I write up the EdD, and continue as a Principal Lecturer and Programme Tutor for a large and complex degree. In terms of my coaching expertise, theoretically I will still be immersed, but I will be out of balance somewhat in not being involved in applied action. Thus, I would envisage that my perceived coaching expertise would slip back to around six, or maybe even five? Having said that my theoretical work (such as *Learning From Legendary Coaches*) is always firmly rooted in practical examples, so I think I would probably not slip below six in the medium term.

Long term there may be more of an opportunity for me to once again reengage with practical coaching. In three years, at fifty-five, I should hopefully be finishing the EdD, and I intend to step down as Programme Tutor (and possibly relinquish Principal Lecturer), as the start of downshifting towards retirement (at sixty). I will still need to find a project that fits in with my life, and suits me, but I will have more flexibility and freedom to do so. Furthermore, once I get involved practically again, as my recent experiences have taught me, I can quickly get back up to speed, become personally invested in the task, and make a positive difference. Hence I would anticipate my perceived expertise to bounce back to say seven or eight. Theory wise I will be starting to slip back possibly, but this will be a slow controlled decline, and from a position of (with all due humility) considerable strength. If I can find the right challenge/context my perceived expertise might even be higher. But it will be difficult to get access to such a project. As stated in my initial life history, people can be suspicious of coaches from my sort of background, and see theoretical knowledge as a threat. Not being a

high profile ex-player and being somewhat intellectual is probably a double-whammy in this regard.

How might my coach development journey come to an end? To be honest I do not see it ending until I do. I have already made a wish list of things I want to do more of upon retiring, and coaching is in there (I will possibly be coaching both football and tennis). With more time on my hands I would see more regular involvement in coaching, plus I also intend to give the occasional *LFLC* public talk, write a *LFLC* book, and possibly even publish a paper or two, so theoretical knowledge will be maintained. I would think I will be at seven or eight still overall in relation to coaching expertise. Not getting too over involved or over committed might be an issue though. I suppose the end point might come about in two ways; failing health (e.g., my eyesight is pretty poor already) and associated energy levels, and/or the widening age gap between me and the athletes causing me to lose relevance/credibility. Nevertheless, I am surprising myself in enthusiastically writing this, but I could conceivably get another twenty years coaching in post-retirement? For God's sake don't tell my wife!

As to how my coaching journey might have been different, I think it is a matter of missed opportunities, going down the wrong road, and losing my balance. If I had developed/committed to my brief semi-professional career as a footballer, then I may have had a more facilitated access into serious performance coaching environments, which I now realise is what I wanted to do. If I had not been so busy with my work in education, then I think I could have made more progress and impact with coaching opportunities such as my short-lived work with a men's semi-professional football team, and potentially managing a high level women's football team. In regards to the latter, withdrawing from that chance is my biggest coaching regret. I would have been coaching international athletes at the national apex of the sport. The coach who did take on the role won a national award a year later (I am by no means all about awards/ego, but it does show the possibilities). It was still the right decision to make – my life was just too far out of balance by then. To paraphrase I had let making a living get in the way of making a life.

If I had have gone into performance sports coaching then I suspect I would be much financially poorer, but considerably happier. The education sector has been rewarding, but ultimately I am on the wrong path. The education I really wanted to undertake was through performance sports coaching, but I was not fully aware of it early enough, or not brave enough to grasp opportunities perhaps. Too late now. But if I had have become a performance sports coach then I suspect I would have been quite good at it. Nonetheless, I am under no illusions that a lack of high level playing experience, and my intellectual side, would have held me back (especially in the particular context of football sub culture). The micropolitics would have effectively restricted my growth, and thus my potential for expertise. In fact, I suspect I might well have gone abroad to coach in order to circumvent this issue. When I was a judo player, and a Senior Club Coach, that might have even meant going to Japan to train and coach (and teach English?), which I did actually consider at one point, and could have led to a different life entirely. Looking back now, I did have a lot of potential as a Judo coach (I even started the sport with the intention to eventually coach it, and with a long term view to opening a martial arts academy with an old friend), and who knows, armed with experience overseas and different thinking, I could possibly have revolutionised the way that rather traditional sport is coached in England. A messy divorce, and a career transition into further education lecturing scuppered all of that.

In terms of my coaching legacy, it is ironic that I am likely to be remembered more for my education of other coaches, rather than my coaching of athletes. Over the years I have educated around a thousand sports coaches in higher education contexts, and I suspect that my greatest legacy is their ongoing positive impact on the lives of others through their own coaching and teaching. I am genuinely proud of that, and I have striven to help produce highly independent and autonomous coaches, who are self motivated and have learned how to learn. That is, who have been empowered to make their own luck, squeeze more learning out of their experiences, and be both principle and evidence based in their approach. Individuals who have come to know their own specialised capacities and personal qualities well – are able to articulate their own philosophies in a balanced manner. Finally, graduates who are able to effectively link theory and practice (who are both doers and thinkers), and who are able to critically consider the why and how of their professional practice, such that they are able to

move with the times, cope with rapid change, and deal with complexity and uncertainty. Looking back I can now see how my own developmental journey as a coach has greatly shaped those ideas on how to educate sports coaches.

As for the individuals I have directly coached, I would hope to be remembered fondly as a coach who cared, and invested much thought and effort in trying to facilitate the improvement of athletes. In that regard I have never restricted myself merely to sport. Hence, for some, I would aspire that my coaching work with them might have spilled over to the rest of their lives. For instance, for the players in the team I just finished coaching, our work on getting in touch with our values, and how we all learned to become more than the sum of our parts through teamwork, may hopefully help them in their broader life experiences. And, of course, as a personal legacy, I have many great memories from coaching, which has significantly enriched my life. As I write I am smiling as I think of so many athletes, and their successes, which I had a humble part in. At its very best my coaching had a magic about it that gave me so much pleasure, and I hope that my athletes sensed that magic as well, and can look back on it warmheartedly.

So, that is how my story finishes for now. It has been powerful writing it down, and it has revealed things to me that I was only partly aware of. I think my story might convey to other coaches the importance of agency, and fully grasping opportunities, in pursuing what you genuinely love to do. And that you *can* make a positive difference in the lives of others by encouraging them to help themselves to be the best they can be. If it inspires others to coach, or helps others to stimulate further their coaching development, then I could not ask for more. Finally, what has it been like to undertake this study over the last few years? For me it has been such a genuine privilege to share part of the coaching journey of my expert-like coach participants. I have gained rich insight into the lived experience of the expert sports coach, and tangibly improved my own knowledge and understanding in relation to sports coaching (and in regards to my own self), in a way that can only enhance my ongoing efforts as a coach educator and coach. I have developed an even greater respect and appreciation for the work and commitment of my coaching colleagues. Whether I eventually finish the Educational Doctorate or not, all this has been reward enough.

David Turner (January, 2014).

Chapter 5: Discussion

5.1 Introduction

Broadly the purpose of this study is to explore how self-perceptions of expertise among expert-like sports coaches may develop, regress, and redevelop over time within the context of sports coaching. It is proposed that the four stories presented in the previous chapter, and their accompanying timelines and storyboards, provide an insight in this regard, informing a greater appreciation of what Bell (1997) referred to as: "...the road one walks in becoming an expert." (p.34). Hence, in this chapter, I will attempt to evaluate and interpret the results of the study, in light of the potential meanings of the stories, how the data informs responses to the research questions, and to compare and contrast with previous literature. As well as meaning making from the participants' stories, I will draw upon illustrative life history and interview data to provide rich thick description (Geertz, 1973; Thomas, 2010) of how interwoven experiences promote change, and affect interpretations and feelings over time. I will also employ abductive reasoning (McKaughan, 2008; Thomas, 2010) to speculate about the possible broader implications of the results (Plummer, 2001).

5.2 Meaning Making From the Stories

As detailed earlier Polkinghorne's (1995) notion of *narrative analysis* was utilised, which is consistent with a constructionist ontology that views narratives as constituting the social reality of the tellers; that is, narratives regarded as knowledge in themselves. In this approach analysis itself becomes the crafting of an engaging and convincing story, that has verisimilitude (the ring of truth, or the appearance of reality), and is thus a seemingly faithful representation of the complex and meaningful lived experiences of the protagonists. Indeed, Bruner (1991) claimed that a narrative representation can only hope to realise verisimilitude, and should be judged by this rather than its verifiability. Hence, in this section, I will engage in meaning making from each story in turn, exploring what the tale of each participant might tell us about the lived experience of becoming, being, and remaining an expert-like sports coach.

5.21 Meaning Making From David's Story

David's story develops into one of extreme busyness, and the balancing of competing demands, reflecting perhaps conceptions of coaching as problematic, chaotic, and only relatively manageable (Jones & Wallace, 2005; 2006), and his developmental trajectory is ostensibly linear, a historically dominant conceptualisation of expertise development that has been criticised recently (Gegenfurtner, 2013; Grenier & Kehrhahn, 2008), although it does exhibit a flattening curve of development towards the latter stages. The story exemplifies that our formative experiences may influence greatly whether we come to coach, and how we coach, in that David grows to value the place of athletics in his life, is relatively well informed about the sport, and wishes to remain involved in some capacity, but regrets the lack of access to one to one coaching that he senses limited his competitive career. Here there are reflections of Dominicé's (2000) notion of *formation* (a blending of experiences that sculpturally shapes a life), Christensen's (2014) observation that experts go through a biographical learning process, and Jarvis' (2009) assertion that the personal biography of learners is the product of experiences perceived by them to be meaningful.

The story also signifies that we may need to seek broader sources of advice, and more conducive contexts, that will better promote our expertise during our developmental journey, whereby David uses a network of contacts from beyond his sport, and changes the club that he coaches at to join a more progressive one. From a learning as dwelling perspective David's active engagement with athletics leads to a natural progression into coaching that shapes him further, while simultaneously he creatively shapes the world that he encounters through agentic action (Plumb, 2008). But, it is also a salutary tale in that adopting diverse roles, and more extensive workloads, proves to be both a brake and an accelerator on his coach development. Hence, we sense of an element of unbecoming, or not dwelling comfortably, as a consequence constricting circumstances, as outlined by Halse (2010) and Butterworth and Turner (2014).

Thus, while David's trajectory is ostensibly linear, critically balancing where best to invest his finite coaching energy is crucial in order to optimally add value to athletes (and himself), as is maintaining a focus on intended outcomes and directions, in what

could be considered a form of deliberate practice (Ericsson & Charness, 1994) in order to maximise learning, featuring strategic agency in the learner (Ericsson et al., 2007). This is why he emphasises critical analyses of which marginal gains to work on with which athletes, the need to not become complacent about attending to aspects of your own continuing professional development, and that it is possible to become distracted from ambitions for projects that have personal importance (such as his disappointment at not developing the women's' section at his club to the extent he desired).

Adopting roles with England Athletics (EA) opens up a wealth of learning resources, and promotes David's expertise, as does developing his commercial coaching provision, and the authoring of specialised books and blogs. Thus, David progressively accumulates knowledge, and experience, and hones problem solving skills, consistent with Herling's (2000) identification of the three basic interacting components of expertise. David informs us that tapping in to excellent people, his own coaching successes, and good testing experiences (for instance, a demanding interview for an athletics post) best promote his expertise, while more generally he advises that expertise should be further promoted via individualised, tailored, and self-directed learning. This chimes with Dreyfus and Dreyfus's (2005) contention that one cannot progress towards expert status without being emotionally involved in our choice making (i.e., the affective commitment to take responsibility for one's own developmental direction), and willing to take risks (i.e., by trusting in others, and taking on difficult tasks).

He regards the greatest threat to his expertise to be not adequately managing his own growth and development in the face of his overall coaching workload, however, the recent ending of his role with EA may also restrict his access to developmental opportunities and learning resources than has been the case in the past, such that contextual change may well impact upon the extent of the further promotion of his expertise (Grenier & Kerhahn, 2008). Thus, in an echo of Bourdieu's attempts to reconcile apparent opposites in social scientific thinking (Grenfell, 2008b), while David's journey towards expertise is partly structured by the extent of his workload, and roles/non-roles with EA, he is at the same time exercising agency by steering his

own learning, taking on certain challenges, attending to specific aspects, and consulting with particular others.

5.22 Meaning Making From Malcolm's Story

Malcolm's story begins with self-reliance and self-coaching in sport from a young age, which then contrasts with his unsatisfactory experiences of coaching as an adult, seeming to signal early precursors of Schempp and McCullick's (2010) claim that experts are forever learning, and engaged in a quest for improvement. Later the influence from mentoring in industry shapes Malcolm's approach to coaching when he reconnects with sport, and rekindles his love of teaching, indicating once more that meaningful biographical experiences can sculpt our later lives (Christensen, 2014; Dominicé, 2000; Jarvis, 2009). He soon finds that his athletes are achieving competitive success, and gains a reputation as a coach who adds value, which matches one of the criteria traditionally employed in relation to participants in sports coaching related expertise studies; that is, a contribution to the development of national standard athletes (e.g., Bloom et al., 1997; Nash & Sproule, 2009; 2011), based upon the assumption that association with such athletes may be a main causal factor in their success. Thus, pondering if he has simply been lucky in gaining talented athletes, and keen to become an even better coach, Malcolm takes charge of his own coach education, thinks differently, and questions received wisdom in relation to the athletics field events that he coaches, resonating with Schempp and McCullick's (2010) observation that experts are never satisfied, and always striving to do things differently.

Apparently driven by motivating emotional qualities that Wiman et al. (2010) indicated are emergent characteristics underpinning coaching expertise development, Malcolm steadily grows in awareness from his learning, and builds a resource of experiences from his accumulated coaching history, in much active experimentation that could be described as *doing as development*. Grenier and Kerhahn (2008) maintained that because expertise cultivation is not a straightforward matter, it requires continuous learning and experimentation. Malcolm recommends that those aspiring to coaching expertise need to be unique, and to do things differently, since going down the established route will never set you and your athletes apart. In this regard Capstick

(2013) reminds us that the metaphor of learning as becoming encourages us to respect coaches as unique learners, and recognise the significant influence of their personal biographies, which could help to explain why coach learning pathways have been described as idiosyncratic (Callary et al., 2012; Crickard, 2013), and articulates with Jarvis' (2006) observation that our experiences, and our learning from them, are personally and socially constructed, as well as constructing. Hence, Callary et al. (2012) explained how episodic experiences considered meaningful for individual coaches can manifest in significant change, and impact upon subsequent learning, such that coaches' developmental directions will inevitably be dissimilar, especially when the coach is autonomous and self-directed, as per Malcolm's disposition.

Certainly, if we think of expert-like coaches as needing to be working at or towards the cutting edge of their profession, to elevate themselves and their athletes above contenders, then they are required to eclipse the norm, and walk a less worn path. Thus, as Malcolm recommends, to promote expertise more fully we must open our minds to new ideas, and supplement our knowledge in order to gain a competitive edge, but also not ignore our own coaching history as a resource, and how we might apply existing knowledge, and re-evaluate the tools that we might best use in coaching action. In support of these assertions, Wiman et al. (2010), drawing on the opinions of elite coaches, concluded that coach development is a self-adaptive process, with open-mindedness and introspection enabling coach learning, driven by the agency of the coach, as is patently the case with Malcolm. Consequently, he considers that one of the greatest threats to his expertise is a lack of adequate access to learning resources, along with potentially being side-lined because of micropolitics (being perceived by some as a controversial character), the latter being a concept highlighted by Potrac and Jones (2009) as problematic within the coaching domain, since it is contested and power ridden.

Malcolm's story also reveals how getting the balance of his work wrong (for instance between international and national coaching commitments), and exhaustion (such as after a busy Olympic year) can impact perceived expertise negatively. Here we sense the utility of Grenier and Kehrhahn's (2008) Model of Expertise Redevelopment, which considers the impact of change upon expertise; in this instance an alteration in the

constituency, and environment territories of expertise (the new international squads that Malcolm took on coaching, and the hangover from operating during that draining Olympic year, respectively) caused a regression in Malcolm's perceived expertise. Moreover, he reveals that he would like to spend more time with his family in the future, and may have to make changes to his coaching commitments to accommodate this.

Overall, Malcolm's development is the most stepped trajectory of the participants in this study, reflecting potentially the staged models of expertise development that have commonly been conceptualised (Gegenfurtner, 2013), and typified by the employment of Berliner's (1994) staged model in relation to coaching expertise (e.g., Bell, 1997; McCullick et al., 1998; Schempp et al., 2006). However, the stages here are far from clear cut, and vary greatly in duration, with periods of relative stagnation and acceleration, and featuring occasional regression at the micro level, such that contemporary conceptualisations of expertise as being non-linear and contingent (Grenier & Kehrhahn, 2008; Nunn, 2008; Martinovic, 2009) are far from negated by Malcolm's story.

5.23 Meaning Making From William's Story

William's story portrays how becoming an expert coach can prove to be far from a straightforward journey, particularly when one is considered to be an outsider or reformer, does not seem to fit in well culturally within certain contexts (such as when William's sport karate orientation is at odds with the ethos of a traditional karate club). We could link here to Bourdieu's (1990) hysteresis effect, although it is not quite the classic conception of a personal encounter with a social environment uncomfortably altered from that which the individual is accustomed and attuned to (Bourdieu, 1990). That is, rather than William exhibiting a lack of a sensitised feel for the game (Bourdieu, 1998), he tends to come to fields with a different feel for the game, or a feel for a new possible game; for instance, when his flamboyant cricketing style is effective but unaccepted, and when he battles to change the performance culture in Karate after becoming national coach.

Nonetheless, largely through a series of chance encounters William finds an alternative developmental path, and inexorably moves towards expertise, although his

tale certainly illuminates that perceived expertise can fluctuate sharply as circumstances change, for instance, when he discovers that he still has much to learn after commencing the study of coaching at university. The influence of chance encounters reflects Abraham et al.'s (2006) observation that the development of expert coaches is serendipitous, while the sharp fluctuations William experiences as a consequence of altered circumstances coincides with Turner et al.'s (2012) contention that the instability of the context in which one coaches might leave one subject to frequent fluctuations in one's expertise, and Orland-Barak and Yinon's (2005) findings that expert performance can fluctuate as a result of adopting altered roles within the same domain. Likewise, Bourdieu views the world as being in social flux, rife with dynamic change (Grenfell, 2008b).

Interestingly, William undergoes a transition of identity as he moves from an athlete to coach mindset, and is sculpted and moulded by his coaching experiences. Hutchinson and Rea (2011) claimed that learning as becoming incorporates notions of transformation and reconstruction, and, thus, the possibility of profound personal change; while the learning as dwelling perspective proffers that rather than simply a transformation in our ways of thinking, a transformed sense of self is implicated as we progressively interweave our embodied practices with the world (Plumb, 2008). In this way learning could be conceived of as a construction of the self, or what Goodson and Adair (2006) term a *reselfing*. Hence, William's transition of identity as he inevitably came to the end of his competitive career, and more fully embraced the challenge of coaching, mirrors Bourdieu's (1994) claim that change is inevitable in most fields (although here it is manifested as a change in the self, and the role undertaken), and, therefore, the habitus is subject to constant alteration; and Bereiter and Scardamalia's (1993) assertion that expertise is increased only when individuals embrace new challenges at the edge of their existing capabilities. Heslop (2011) reported that individuals not only changed in the process of becoming police officers, but that this transformation also affected their subsequent learning, and we can see this in William's story, whereby he goes on to eagerly embrace opportunities to learn further about coaching (e.g., undertaking a Higher Education course, arranging a workshop from an international coach educator, enrolling on a Masters in coaching). Indeed, in an iterative process, William is changed by his learning, and learns how to change.

Patently, William's experiences exemplify the need for coaches to adapt to altered contexts and roles, and learn to play a subtly different game. For instance, dealing with issues of impression management when he becomes national coach, and coming to terms with the micropolitics of how best to deal effectively with the Karate governing body Board. Cushion and Kitchen (2011) suggested that using Bourdieu's thinking tools may engage us in a reflexive discourse about how best to evolve as coaching practitioners in the face of social and political developments, and the metaphor of developing a sensitised feel for the game again seems particularly pertinent in this regard (Bourdieu & Wacquant, 1992). In recent years micropolitics, and impression management, have come to the fore in the academic consideration of sports coaching, with the domain being conceptualised as replete with power issues and a site for struggle (Potrac & Jones, 2009), plus involving a large element of dramaturgical performance in the presentation of the self (Consterdine, Newton & Piggin, 2013).

Hence, William is obliged to exhibit resilience, commitment, and agency (especially in relation to the direction of his ongoing professional development), and a sensitive balancing of factors in his developmental journey. In this regard Germain and Ruiz (2009) reported that a quarter of English participants in their study emphasised emotional commitment as a perceived personal characteristic of experts, while DeMarco and McCullick (1997) identified the keen perception of events (such as, in balancing different factors) as a common characteristic of expert coaches. However, the most consistently prominent finding in regard to the common characteristics of expert coaches is that of an ongoing commitment to learning and improvement (DeMarco & McCullick, 1997; Hardin, 2000), consistent with William's determination to grow and progress as a practitioner. Wiman et al. (2010) reported dedication, drive, and passion, as important characteristics considered necessary to underpin coaching expertise development, and indicated that an obsessive dedication to become the best was required for expertise cultivation. Hence, William expresses that he believes coaching success is wrapped up with who you are, and that he is still the competitor that he has always been, striving for success at the highest level.

He bounces back from setbacks, and being politically side-lined, invests heavily in his own continuous development, and implements processes to change performance

karate. Despite being sapped by a sense of exhaustion when he eventually attains the national coach position, initial frustrations in trying to change things, and a feeling of aloneness in the top job, gradually the rightness of his direction is vindicated by events and results. This sense of a rightness of direction could be equated to phronesis, a form of practical wisdom, which emerges as a result of much accumulated experience, and is manifested in the practitioner having the: "... ability to see the right thing to do in the circumstances." (Thomas, 2011, p.23). Gallagher (2007) claims that phronesis and expertise are alike, with both representing embodied forms of know-how, although the former exclusively necessitates an ethical dimension, in that the phronimos is compelled by his situated principled self to act virtuously in dealing with issues (Gallagher, 2006). Thus, William does what he thinks is right for the coaching of Karate athletes, and doggedly fights for what he believes in, armed with an increasingly nuanced view of the circumstances within which he operates, and an appreciation of the possible opportunities for action in the midst of a complex situation (Seifert et al., 1997, cited in Halverson, 2004). Appositely, in respect of William's political battles, Frank (2012) recommended that we must employ phronesis in order to avoid being ambushed by power.

William's fears in regard to his perceived expertise are of straying down the wrong path with certain ideas, or of being too strong willed in implementing interventions. But, he regards the greatest danger to his expertise as getting the balance wrong (such as between work, family, coach development, and coaching) – what he describes as that homeostasis between everything. Here is a parallel with the notion of the sports coach as an orchestrator, who must cope artfully with complexity, ambiguity, and chaos, by managing complex change, cultivating micro-political literacy, and developing a sensitised noticing (Jones et al., 2012). In this way phronesis becomes a matter of attempting to reflexively understand conditions (and competing demands) as an ongoing problematic process, whereby there are always choices and decisions to be made, particularly in confrontations with power, and we must constantly balance what is at stake (*illusio*) within (and beyond) a changing game (Frank, 2012).

William's latest transitional shift seems to be towards coach education, as his identity transforms once more as an ageing martial artist, highlighting that for him the game is

still changing, there is more becoming to be negotiated, and a different way of dwelling in the world to be adapted to. Grenier and Kerhahn's (2008) Model of Expertise Redevelopment represents the difficulties of maintaining and adapting expertise in shifting situations, which occasionally compel experts to regress to more developmental modes, due to significant change in the territory of expertise within a domain. Moreover, Fish (1989) pointed out that changing circumstances will change the rules of engagement, such that in a new setting William will require a plasticity in his habitus, his phronesis, and his expertise, all of which may prove to be an effortful and gradual process. Herling (2000) contended that expertise is dynamic in that it is underpinned by a process of continual improvement, but, here we also witness the need for a constant adaptation of the expert-like practitioner in response to altered circumstances. As Johnson (1987, cited in Kuchinke, 1997, p.74) declares: "Expertise can most simply be defined as highly adaptive behaviour."

Nevertheless, William advises that in relation to coaching you can change the game, and you can change yourself, but you need to remain true to who you are at your core. Frank (2012) has contended that Bourdieu's concept of habitus may be regarded as akin to phronesis, and that phronesis may only be achieved through promoting change within oneself, while Flaming (2001) asserts that phronesis is applied on the basis of deliberation founded upon both prior experiences, and knowledge of one's self.

5.24 Meaning Making From Sam's Story

Sam's story illustrates that the journey towards expertise can be one of becoming, unbecoming, and becoming something different again, consistent with Colley et al.'s (2003) metaphor of learning as becoming, Nunn's (2008) contention that expertise is an ongoing process of becoming, and contemporary literature employing the notion of becoming in relation to coach development (Callary et al., 2012; Duarte & Culver, 2014; Trudel & Gilbert, 2013). For example, Sam moves from football to tennis because it offers a better cultural fit for his coaching ambitions, which brings to mind both Bourdieu's (1990) hysteresis effect, as a form of an uncomfortable culture shock, and Plumb's (2008) thoughts that as we weave ourselves into the world, we grow attuned to detecting when our intentions go against prevailing patterns. Interestingly though, in this instance, rather than the classic conception of hysteresis as an

indolence in the habitus in response to alterations in the field (Hardy, 2008), it is Sam's changed thoughts and personal positioning in regard to coaching, as a result of his experiences, that causes a sense of dislocation with football. One could therefore suggest that in this instance the field (in this specific sub cultural context) lags behind Sam's developing habitus. Sam literally loses a feel for one game, and then gradually develops a sensitised feel for another game, as he develops an attuned practical mastery (Bourdieu, 1998), and adapts his *illusio* to comprehend what the stakes are in the new game, and apprehend the extent of his revised personal investment in taking them seriously (Frank, 2012).

The story also reveals how an ostensibly linear developmental trajectory is in fact far more convoluted. For example, Sam's reimagining of the shifting scale of perceived expertise in relation to the timeline of his coaching development indicates that as one grows more expert our conception of what coaching is, or could be, expands exponentially. This links to Herling's (2000) contention that an emphasis on the intentional cultivation of expertise, as is consistent with Sam's dedicated approach to tennis coaching during the tale, would accentuate the process or journey, and promote a dynamic expanding quality in relation to expertise, as one strives to improve further. Additionally, lateral shifts (such as when Sam moves into coach education, and business) can draw us into different but associated domains of expertise (on to a new timeline graph entirely perhaps), as was also intimated by Herling (2000) when he stated that expertise may continue to extend into novel but related areas in the process of ongoing development.

We learn how, for Sam, working in expert teams (most notably that at Gosling International High Performance Tennis Centre, which he values so greatly), and catalytic encounters or interpersonal turning points (for instance, with the goalkeeper who gave him some specialised coaching that initially sparked his interest in helping others) support a never-ending process of improvement as a coach. In this vein both Halverson (2004) in the context of education, and Standal and Hemmestad (2011) in relation to coaching, asserted that in order to cultivate our own phronesis we must observe and interact with others exhibiting practical wisdom in action, consistent with coach learning literature typically implicating the developmental influence of mentors

(e.g., Bloom, Durand-Bush, Schinke & Salmela, 1998), a form of apprenticeship (e.g., Cushion et al., 2003), and communities of practice (e.g., Culver & Trudel, 2006). Moreover, expert teams, defined as interdependent team members, possessing unique experience, knowledge and skills, who coordinate their efforts to produce superior team performance, have been recognised and investigated in recent expertise research (e.g., Salas, Rosen, Burke, Goodwin & Fiore, 2006).

Key messages from Sam for those who aspire to expertise in coaching are that we need to learn to be comfortable with the unexpected as an enjoyable challenge and a potential resource, and to create our own dissatisfaction in regard to our own ongoing coaching development. Hence, Standal and Hemmestad (2010) asserted that coaches who exhibit phronesis are better equipped to deal with the messy realities of coaching practice, while Standal (2008) recommended that the insecure practitioner in effectively exercising professional judgements in conditions of inevitable unpredictability should both accept uncertainty, and remain open to constant learning and revised understanding. Schempp and McCullick (2010) highlighted that expert coaches are constant learners, who are never satisfied, and in this way Sam's call for coaches to create their own dissatisfaction appears to dovetail with Nunn's (2008) position that full expertise is at best provisional if not unattainable, and Turner et al.'s (2012) claim that expertise needs to be conceptualised as dynamic and adaptive rather than a realisable destination.

Sam believes it is only natural that perceived expertise will fluctuate, especially at the everyday level, and that we should always be exploring alternative ways to improve players better, or more quickly, by constantly working through developmental cycles. Whereas, the everyday fluctuation of perceived expertise is not something that appears in literature thus far, Schempp and McCullick (2010) did claim that experts know that: "To stop learning is to stop getting better." (p.223). Nevertheless, a difficult period where Sam worked through many developmental cycles in a condensed period of time, and experienced much conflict in enforcing excellence standards, caused significant fluctuations in his perceived expertise, and gave him an insight into how some coaches might suffer from burnout, connecting well with contemporary theories that have highlighted how an expert's performance might be threatened by alterations

in contextual factors within which they operate (e.g., Grenier & Kerhahn, 2008; Martinovic, 2009).

5.3 Research Questions Revisited

- To what extent does perceived expertise fluctuate in the developmental journey of expert-like sports coaches?

In retrospect, I commenced this study with what now seems an erroneous assumption that perceived expertise would fluctuate sharply in the developmental journey of expert-like coaches. In the participants' experience it seems more accurate to describe perceived expertise as usually smoothly undulating over the medium to long term (within interviews they all confirmed this), with an overall upwardly progressive trend, reflecting the dynamic expanding quality of the journey towards expertise which Herling (2000) referred to. This undulation features relative accelerations, decelerations, and occasional flatlining or stagnation of perceived expertise; with, interestingly, no examples of a reduction in perceived expertise from year to year, with the notable exception of one participant in one particular phase (to be discussed shortly), and in my own exemplar timeline (See Reflexive Interludes supplementary document). Furthermore, if the timeline trajectories were displayed with curved rather than the straight lines between the yearly scores, then an undulating pathway might be even more apparent.

All of the stories produced, and the associated timelines, mostly illustrate a generally steady rise in perceived expertise over the years. Granted Sam's creativity has created a slightly different scaling, and representation of his subjective assessment of his own expertise, but, even here, his ongoing expanded awareness of what coaching is, and can encompass, portrays a growing expertise, if not in his actual scoring of that expertise. That is, he senses that he progressively knows more about coaching, but always has more to learn (and is thus to some extent running in place to keep up) as the boundaries of the field of expertise balloon away, in a kind of continuous big bang effect of expanded awareness, once again mirroring Herling's (2000) assertion that expertise is dynamic and tends towards expansion. It is important to note though that

even Sam's timeline illustrates periods of differential acceleration in perceived expertise.

While we see principally progressive development represented in the timelines, all exhibit a flattening off of the curve of development towards the latter stages (see Figure 21), in what might be taken as a reflection of the law of diminishing returns. That is, as with attempts to gain fitness, early rises in perceived expertise may be relatively easy to achieve from a low starting point, but incremental gains become more difficult to achieve as one attains more elevated expertise levels. In essence, it is easy to get better, it is harder to get better still. In fact, it could be that it even becomes somewhat problematic to maintain the high level of expertise one has already reached, although this is not apparent in the timelines featured here (with the exception of my own example – see Reflexive Interludes).

If one considers the extent to which perceived expertise fluctuates during the long-term coach learning journey, one can reasonably state *not greatly* on the evidence presented in this study. For example, a rise (or fall) of more than one out of ten for perceived expertise over the period of a year is extremely rare in all participants' timelines. For Malcolm and David it never happens (and they do not go backwards at any point). For Sam it only occurs in the very early stages where he first discovers what coaching is, and his awareness expands rapidly, and then during a special period of accelerated development when he goes to university, as well as completing his Level 4 coaching award, and an influential NLP course. Nonetheless, the developmental trajectories of the coaches exhibit identifiable periods of differential growth or stagnation, and feature unique personal challenges and opportunities, implicating the need for adaptive behaviour and plasticity from experts (Johnson, 1987, cited in Kuchinke, 1997). William is the exception referred to earlier, in that his perceived expertise reduced at a later stage in his developmental trajectory, and indeed fluctuated sharply both ways during a sustained period.

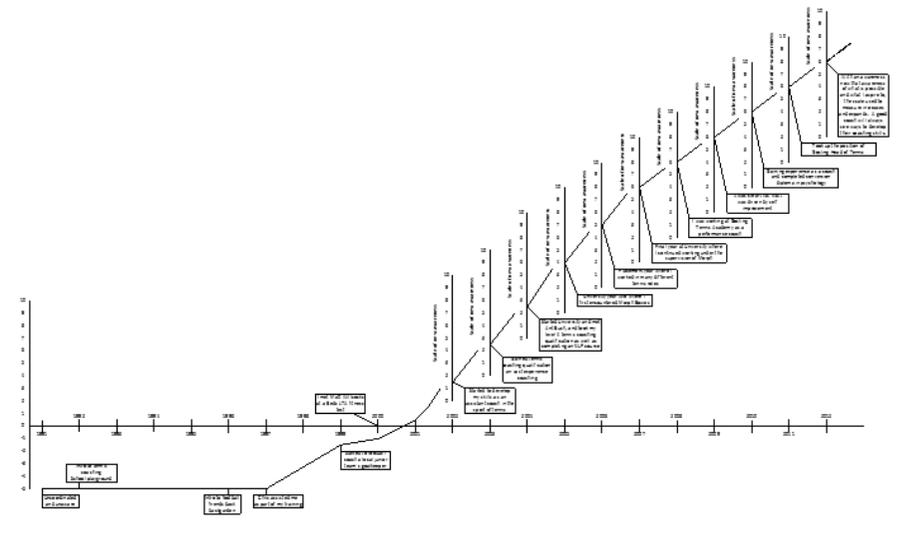
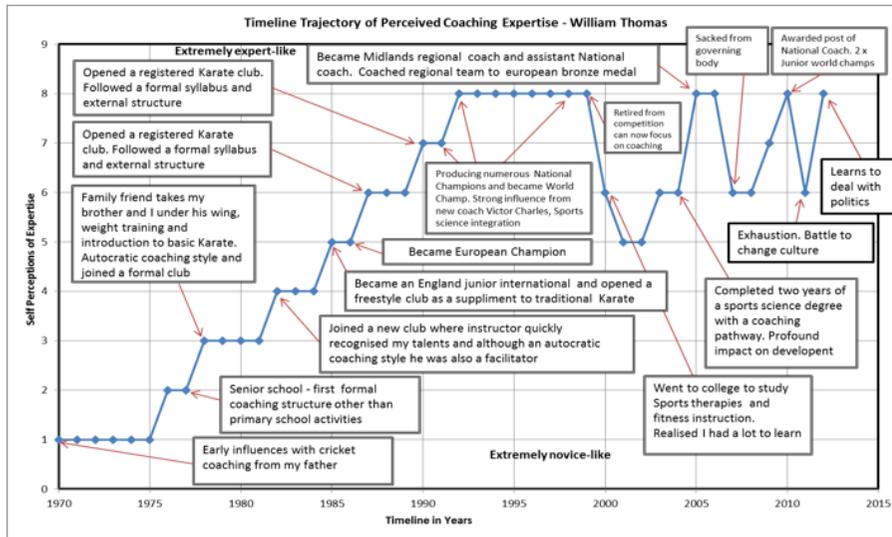
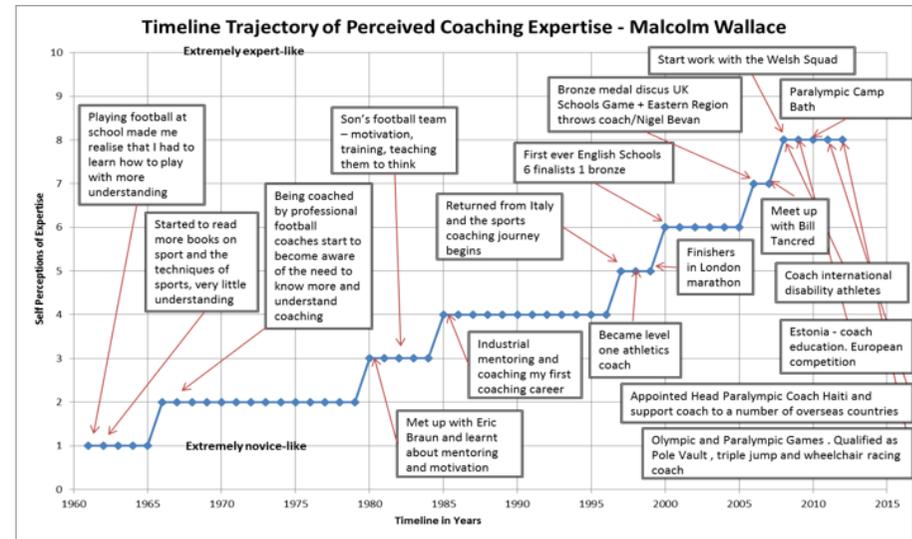
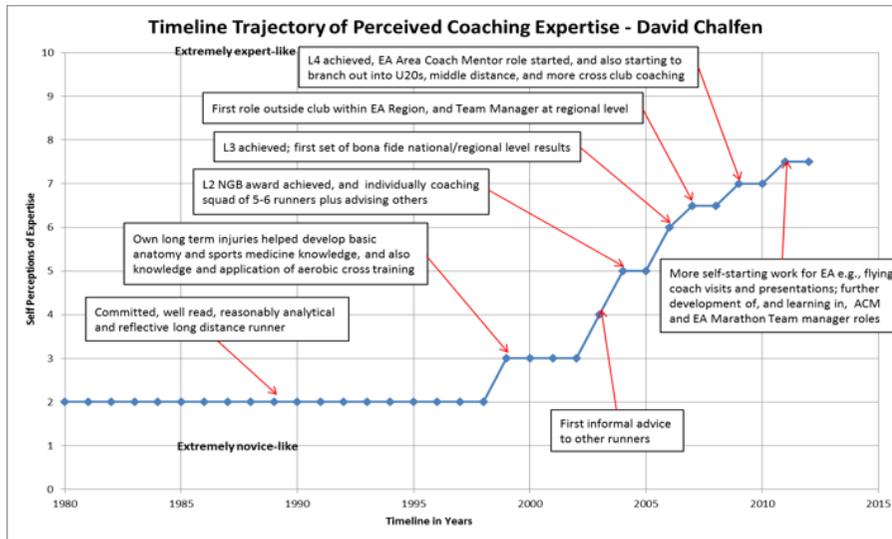


Figure 21. All Timeline Trajectories Presented for Comparison.

- What are expert-like coaches' experiences of fluctuations in their perceived expertise?

A significant reduction in perceived expertise occurred when William retired as a competitor, and started to make the transition from an athlete to coach mindset (illustrating well Martinovic's (2009) assertion that assumed transfer of expertise to even closely matched fields may be flawed), was politically excluded from opportunities to coach at international level, plus discovered he still had a lot to learn about coaching from his initial engagement in study of the area. However, he also subsequently described a profound impact upon his coaching development as a result of the Higher Education study of coaching, and then got the chance to coach with the national set up with some success, heightening his perceived expertise substantially. Then there was another two-point reduction in his perceived expertise when his lack of fit in the national set up caused him to be sacked from the governing body, and he was again side-lined from the international scene. Later he suffered a similar decline after finally attaining the national coach position, at which point fatigue from the battle of actually getting there combined with frustrated attempts to alter the performance culture took their toll. Finally, his efforts at changing things for the better began to eventually pay off in terms of performance results, he learned to skilfully play political games to his advantage, and the rightness of his direction was strengthened; and, thus, his perceived expertise shot back up again.

William's story therefore features a large element of fluctuation in perceived expertise, and, although this seems an exceptional example of a period of identifiable ups and downs, it raises concerns about the likely effect of such circumstances upon the coach. This supports the notion that expertise may be greatly affected by, and sensitive to, contextual changes, exemplified in Gegenfurtner's (2013) study on transitions in expertise, whereby changes in work context can cause lower performance due to a lack of adaptation, and compel individuals to positively adapt in order to regain expertise. The period of great turbulence was quite sustained (around fifteen years), and William expressed his associated frustrations, and sometimes exhaustion, several times during interviews.

The impact of all this upon an individual's motivation and well-being could be a cause for concern, and it indicates the potential extent of fluctuation in perceived expertise that coaches could be exposed to during their careers; which resonates with Orland-Barak and Yinon (2005) who found evidence of fluctuations in the performance of expert educational mentors, associated with adopting altered domain roles. Such extreme fluctuations could prove to be a testing shock to the self as a non-linear system (Knayazeva, 2001). That is, a challenging autopoietic activity whereby the coach, in a longing for completion, and in a response to elements perceived as missing (Knayazeva, 2001), actively struggles and exercises their capability to recreate and maintain (Luhmann, 1990) the coaching self in the face of difficulties experienced, expressed as a form of self-construction in response to adversity, which Christensen (2014) referred to as a biographical learning process.

But, to put things in perspective, for the most part the developmental trajectories of these expert-like sports coaches might well appear to be ostensibly linear if we were to pan back far enough. Nevertheless, the participants were all easily able to identify and discuss critical incidents, experiences, and encounters which had significant affects upon their perceived expertise, and referred to the inevitable ups and downs of the learning journey. As an illustration Sam stated: "I think the journey to becoming a better coach is an up and down journey." This indicates that it may be inevitable that perceived coaching expertise and developmental progress will fluctuate to some extent. Furthermore, periods of relatively accelerated or stifled development can be identified, and while it might not be appropriate to term these fluctuations, there are certainly oscillations, leading one to consider what might cause them, and how might coaches cope with experiencing them?

Moreover, the participants indicated that if we were to zoom in on the developmental trajectories and achieve a more detailed short timescale view, then more turbulence might be evident. Indeed, it was suggested that in the moment perceived expertise would fluctuate a lot. For instance, David indicated that there could be quite a fluctuation in the everyday compared to the long term, which might cause emotive reactions in the moment, especially if coaches are overly reflective on every incident, leading to either feeling transcendent or ignorant in the face of transient scenarios.

Likewise, Malcolm believed perceived expertise inevitably has to be up and down at the everyday level. Similarly, Sam advocated that there would be more fluctuation and even regression (something contrastingly not evident in his long term development) in the course of daily coaching work, since coaching is so complex, and there is always something you could have done better or differently; such that coaches could be considered to be always insecure in the face of volatile moment to moment occurrences and flash points, whereby emotional reactions and frustrations at not being able to solve unexpected problems could be triggered. Likewise, William suggested that everyday level fluctuations can often be related to variations in athlete performance. This more extreme turbulence in perceived expertise at the everyday level is not something evident in previous expertise literature, although it is perhaps implicated by some authors who have highlighted the complexity and uncertainty which characterise expertise generally (e.g., Nunn, 2008), and sports coaching specifically (e.g., Jones et al., 2012).

On a larger scale, but intriguingly still implicating an emotive element, William reported that he felt quite vulnerable during major fluctuations in his perceived expertise. For instance, when he first studied coaching in a Higher Education context it highlighted for him just how much he did not yet know, and left him feeling inadequate and novice-like, much like the maths teachers in Martinovic's (2009) research, who occupied transitory positions on a novice-expert continuum dependent upon altered contextual factors. William also described how frustrations arising from micropolitics sometimes caused sharp fluctuations in his perceived expertise, such as when the Board of the governing body put a brake on the implementation of his ambitious plans to restructure processes for the development of regional and national coaches. This matches Potrac and Jones' (2009) description of sports coaching as contested and power ridden, and illuminates one likely causative factor behind fluctuations in perceived expertise, or turbulence in the coach learning journey.

Malcolm described his developmental trajectory as featuring accelerations and decelerations in perceived expertise, with some steep upward curves and some plateaus experienced, not necessarily describing a jerky course, but rather a cross between fluctuation and undulation. However, he expressed: "The thing I always worry

about is that my perceived expertise might just suddenly drop off. And I do worry about that.” He wondered if talented athletes or coaching work might dry up, and reflected that he had seen some good coaches fall away, and drop off the radar, with the world seemingly coming to pass them by, in an echo of Bourdieu’s concept of hysteresis, which signals an ill-fit to altered field circumstances (Grenfell, 2008b).

- How do expert-like coaches learn and adapt in response to fluctuations, and what are some of the outcomes for coaching practice and coach development?

Lyle (2002) claimed the broad function of the coach is to reduce unpredictability, and endeavour to maintain control in response to situational dynamics. Sam provided a fascinating insight into how coaches might attempt to cope with those moment to moment occurrences where they are always potentially insecure, and, briefly, might not be well equipped for what they immediately encounter. He advocates coaches need to cultivate a positive mentality of accepting that things will not always go to plan, and should attempt to become comfortable with the uncertainty of not knowing exactly what is going to happen, linking to Bowes and Jones’ (2006) assertion that coaches often operate at the edge of chaos, and mirroring Standal’s (2008) recommendation that an acceptance of inevitable uncertainty would help adapted physical education practitioners to cope better with conditions of unpredictability. Thus, a letting go of rigid expectations of outcomes might promote the ability to flexibly problem solve in the moment, or as Sam puts it (clearly influenced by his NLP training): “Being solution focused for whatever happens.” With such an acceptance of uncertainty even apparently negative experiences encountered may be used as a positive learning resource as the challenges of coaching practice unfold, as Sam explains: “If I can accept it, it isn’t going to affect me, other than to drive me on to do things differently.” This resonates with conceptions of intelligence as knowing what to do when you don’t know what to do (Claxton, 2004), and reflects literature that portrays experts as rapid and skilled problem solvers (Herling, 2000; Kuchinke, 1997), although flexibility in the problem solving process is additionally implicated here.

Notwithstanding, just because coaching is complex, and ever open to be critiqued since there is always another way to approach it, this is no excuse to surrender to

uncertainty. For instance, in writing about Bourdieu's concept of habitus, Maton (2008) argues that while we may be predisposed to respond to certain regularities of a field, we also retain the capacity for structured improvisation in the face of the unforeseen. Sam advises that the overall coaching process is always more important than moment to moment, or even longer term, fluctuations. He habitually asks himself, what he could have done differently or better, in light of the overarching aim of improving players quickly, and believes that this approach guides well a profession that is so broad and difficult to pin down. Self-monitoring has been posited as a common characteristic of expert sports coaches (e.g., Schempp & McCullick, 2010), while reflective practice has been promoted as significant for coach development and effectiveness (e.g., Irwin et al., 2004). However, David cautioned that coaches should not become overly reflective on every little thing in the moment during coaching practice, and simply grow inured to experiencing such fluctuations, since the micro issues are always a constituent part of a bigger coaching process picture.

Intriguingly, William described how he attempts to flatten the peaks created by fluctuations at the everyday level, through learning to avoid knee-jerk or fiery reactions. He explained how he now tends to sit back more, and reflects before he responds in the moment in coaching practice. He stated: "If I'm undecided, I'm now conscious I'm undecided, so I wait." Hence, by adopting a more thoughtful approach, William can slow down the decision making process, try to ensure decisions made are more likely to be appropriate, and can potentially make the curves of alterations in his perceived expertise less steep. Mirroring the proverb, *Marry in haste, and repent in leisure* (Cambridge Advanced Learner's Dictionary, 2013), he states: "You might get a quick result from a quick decision, but if it's the wrong one it will take a long time to put right." Here we see a connection with research on expert decision making, in that it has been established that experts tend to take longer assessing situations, and make decisions later, while novices look for and apply solutions more quickly (though not necessarily the ones most suitable for the context) (Lyle, 2002).

Therefore, it is apparent that coaches might cope with a relatively greater amount of fluctuation in perceived expertise in everyday coaching practice by becoming comfortable with uncertainty (thereby being more relaxed and flexible in dealing with

problems as they unfold), getting micro issues into perspective in light of the broader coaching process, and reflecting carefully upon decision making to promote a superior appropriateness of responses (and in so doing reduce the effects of more extreme peaks and troughs of perceived expertise). But, let us turn our attention away from the everyday fluctuations to the more long-term undulations or oscillations in perceived expertise experienced by the participants, due to turbulence in their developmental journeys, and the effect of these on learning and adaptation.

It would be fair to state that all of the participants experienced turbulence that caused undulations or oscillations, rather than fluctuations, for the most part, on their long-term journeys, manifested in significant events and encounters, accelerations and decelerations (and rarely regressions) in coach development, and resultant impacts upon their coaching practice. As an illustration, Sam described catalytic encounters (e.g., with the influential goalkeeping coach) and penny dropping moments (e.g., when he realised the importance of facilitative questioning from the university coaching assessment exercise experience) in his story that fuelled rapid rises towards expertise. He also referred to problems encountered, some of which extended over a considerable period of time, such as dealing with tennis parents' as significant others in the coaching process.

Sam's reaction to the turbulence experienced on his developmental journey is eye opening. He indicates that because of his own disposition he is perhaps more receptive to the positive opportunities that present themselves to him along the way, which are more easily recognised and eagerly grasped, while problems encountered are viewed as a potential resource for further development (as a Japanese proverb advises *A problem is a mountain filled with treasure* (Woolfrey, 2008)). At this point a link could be made to Dewey's embodied construction perspective, whereby learning is considered to be a holistic ongoing process, involving a committed person readjusting and growing in a continuous and lifelong attempt at harmonisation with an environment ever in flux (Dewey, 1916; Hagar, 2005; Hagar & Hodkinson, 2009). That is, because coaching has become so invested as part of Sam's identity (he describes it as a large enriching part of his life, and a way of being), and has come to be something that he cares deeply about, it enables him to more readily engage with

turbulence arising from educational opportunities and the overcoming of difficulties. Hence, although progress over the long term may ostensibly appear to be progressive and linear, this may only be so due to the commitment and ability of the coach, as an embodied agent, to make the most of both positive and negative learning resources that arise.

William also emphasised the importance of deriving positive messages from apparent failures on the meandering path towards expertise. When he experienced being completely out of his depth trying to coach in a repeat bout of a world championships final at one tournament, it made him resolve that it would never happen to him again, and became a spur for his further coaching development, and the subsequent heightened rigour of his coaching practice. Hence, he asserts that while we may not always be able to effect things as we might like to in coaching, problem solving is always part of the nature of the job, and we must be resilient, or indeed even motivated to succeed, in the face of failure. In a similar way Sam asserted that surfing the turbulence encountered on the coach development journey might even be an essential part of the enjoyment of the coaching challenge. Correspondingly, Wiman et al. (2010) found that open-mindedness was perceived by coaches in their study to be a crucial characteristic in development towards expertise, whereby a deliberative mindset (Fujita et al., 2007) is adopted which causes the individual to be consciously receptive to all possible learning resources, and there is an active willingness to introspectively look within oneself, weigh strengths and weaknesses, utilise feedback, and enact change, in what is essentially a self-adaptive process.

David highlighted an incremental process of coach development over time, with a concatenation of small events, and incubation of associated ideas arising, leading to a gradual evolution of his coaching practices, rather than a series of sea changes. This connects with Frank's (2012) contention that phronesis is gradually developed via a series of confrontations where the stakes are high and an altered feel for the game is inexorably cultivated. Nevertheless, despite some reticence in relation to over reflection, David cautioned that reflection is required to guard against complacency (as Sam expressed: "The most dangerous time in coaching is when you think you're doing a good job."), and reminds us that we can also actively make our own luck

developmentally. For example, David habitually critically considers the cost benefit analysis of where best to invest his coaching efforts to achieve the best outcomes, and similarly evaluates which potential marginal gains to concentrate on with which clients in coaching practice. Herling (2000) claimed there are three basic interacting components of expertise (knowledge, experience, and problem solving), and here we get a sense of David using his coaching knowledge to make critical decisions about which experiences to best engage with (for him and his athletes). Thus, we also have another link to phronesis, since there is an ethical dimension apparent in such decision making, a requirement to do the morally right thing in exercising one's practical wisdom (Gallagher, 2006) as a coaching practitioner.

While coach development may be viewed as an evolution, or a process of learning as becoming (Colley et al., 2003), there may not necessarily be an achievable end point. William considered himself as unfinished, with coach development and the refinement of coaching practice regarded as a constant progression, despite being a successful national coach. He mused that he may never be ten out of ten for perceived expertise, although he might get somewhere near it given certain world standard athlete performances. In a similar vein Nunn (2008) contended that full expertise is at best provisional if not unattainable. As Schempp and McCullick (2010) have highlighted it is well established that experts are never satisfied constant learners, always striving to do differently or become better. Thus, Malcolm described his own development as an unending journey of gradual realisation, with the questioning of received wisdom related to coaching practice, and a burgeoning awareness of how things might be done differently, driven by an unquenchable thirst for learning. Likewise, Sam implicated coaching as a never-ending process of constant improvement, with the coach always exploring better ways to do things, consistent with Turner et al.'s (2012) conceptualisation of expertise as an ongoing journey, rather than a realisable destination. Malcolm also claimed that it is difficult to regress as an expert if you are a constant learner, although William explained that he nevertheless fears possibly being too strong minded in relation to some approaches, and consequently going down a wrong path, or dead end, with certain coaching ideas, implicating the need for a reflexive quality, as a means of critically examining ourselves and our *in situ*

assumptions (Riach, 2009), so that unchecked phronesis does not morph into hubris (Claxton, Owen & Sadler-Smith, 2013).

One consequence of dealing with the ongoing vicissitudes of coping with a coaching domain that is both multi and interdisciplinary, and features a plethora of potentially influencing factors upon both coach and athlete performance (Jones & Turner, 2006), is a seemingly natural propensity for the expertise of sports coaches to expand into associated areas. William, David, and Malcolm all gravitated towards expertise in strength and conditioning, in addition to expertise in their own respective sports. Sam moved towards expertise in psychological and business realms. William, David, and Sam all became progressively more adept in the related field of coach education. While Herling (2000) noted that most research indicates that expertise in one domain is not easily transferable to another, he also cites the possibility of the expert's behaviour expanding, or growing, into related domains, implicating some transfer to novel situations in the process of ongoing development. Herling (2000) also highlighted the dynamic expanding quality that would be promoted by an intentional cultivation of expertise, and all participants were recruited on the basis of a willingness to be involved in this kind of study, which might reflect findings that experts have an active interest in their own ongoing development (Schempp & McCullick, 2010), and mirror the observation that experts display a never-ending thirst for learning (Nunn, 2008). Much has been written in recent years about holistic sports coaching (e.g., Cassidy et al., 2009), implicating the enmeshed influence of several interacting sub-disciplines, and/or the need to view the athlete as a multifaceted whole person; but, the above might additionally signpost towards a more holistic conception of the developing sports coach, in terms of their diverse and interacting learning needs, as well as their shifting and multi-layered identity as a practitioner. For instance, this connects well with the metaphor of learning as becoming, which Heslop (2011) proposed offers a more inclusive view of learning as an ongoing process, encompassing both individually based Deweyan embodied construction (Dewey, 1916; 1938) and socially situated learning (Lave & Wenger, 1991).

Generally, the participants seem to have utilised problems encountered as an indicator that more, or different, learning was needed, to adapt to changing conditions and

demands. Herling (2000) commented that expertise is dynamic, and that constant attainment of knowledge, reorganisation of information, and progressive problem solving are an integral part of this quality, while Grenier and Kerhahn (2008) recognised that changing and interconnecting contextual factors can challenge the expert's experience, problem solving, and knowledge. Hence, Sam indicated that you can bank some coaching knowledge, but it will never be enough, because the game is constantly changing. Thus, our coaches adapted in response to the turbulence they encountered, and their coach development, and coaching practices altered and evolved as a consequence. For instance, David became an Area Coach Mentor, and an author and blogger, and learned more himself from helping others; Sam developed anchor points as a means of controlling the uncertainty of coaching, and providing a guiding framework of identifying and justifying what aspects most need attending to; Malcolm brought his learning about mentoring from industry to bear in attempting to empower his own athletes to think for themselves; and William learned to play micropolitical games, and to deal with issues of impression management.

Notwithstanding that some of the turbulence was due to happenstance, the coaches appear to have adopted an attitude of making the most of circumstances, or, indeed, sometimes actively carving them out. David indicated that we make our own circumstances in life, and demonstrated this in his decision to move to a different athletics club that better suited his own growing coaching ambitions. For Sam there were a number of critical catalytic encounters with highly influential people, which he believes were interpersonal turning points, where people changed the developmental journey – but, Sam also wonders if he might have been subconsciously looking for, or more open to valuing and exploiting, such opportunities to learn, and to fill a void. Malcolm had to jump in the deep end and support international athletes when a head coach did not turn up at a regional training event in a crucial *I can do this* experience; but, he also actively chose to extensively network professionally, and to doggedly seek his own bespoke learning resources to promote his own development beyond the usual coach training in his sport. Cushion and Nelson (2013) felt that such training was homogenised, and could be akin to indoctrination, rather than suitably individualised, and situated to the coach's needs. William was fortunate to have a father who introduced him at an early age to sport and coaching, and was influential in respect of

the importance of building a culture, however, he still needed the resilience to fight his way into coaching positions as somebody regarded as an outsider and reformer. As Berliner (2001) proposed, when writing about teaching, expertise could be considered as an increase in agency over time, with self-reliance implicated as a key feature of an endless process of becoming (Nunn, 2008). In the midst of (at least partly) determining their own developmental pathways, even feelings of disjuncture or discomfort, arising from unfamiliar situations or contextual transitions, may be used as a stimulus for further learning (Jarvis, 2009), and an ongoing development of their coaching biography.

Sam stated that he is aware that his coaching identity will be moulded, and evolve, as a result of his life and coaching experiences, and we can see in the coaches' stories several instances of what Dominicé (2000) referred to as *formation* – a blend of formal and experiential learning, that in this case shapes their coaching life. For instance, the lack of one-to-one coaching during David's athletic career clearly impacts upon his coaching practice and intentions later. Furthermore, Malcolm's dissatisfaction with governing body coach education provision causes him to seek out his own learning resources.

And so, these coaches seem to ride the waves of the turbulence on their journeys, regardless of whether that turbulence is generated by circumstance or via their own agency. This results in a series of adjustments as they accommodate to and assimilate new experiences and learning, and a crucial part of that adaptation relates to their coaching philosophy. As Sam stated, again reflecting the notion of an anchor point: "Knowing well your own values and beliefs helps coaches to be more stable and secure in the midst of an uncertain game." For instance, providing a guiding framework in coping with the constantly moving boundaries of coach-athlete relationships. Interestingly, Flaming's (2001) assertion that phronesis is applied based upon both prior experience and self-knowledge (such as that of one's values), could easily be extended here to the practice of this expert-like coach, and the application of his accumulated wisdom in action.

For William that adaptation to turbulence is expressed well in his cultivated ability to be like a chameleon in coaching practice, whereby he can be the coach that he needs to be, or play the coaching role that is required, to match the different expectations of athletes and others. However, the extent of that adaptation and flexibility within coaching practice remains bounded by William's sense of the rightness of his coaching direction, which has in turn been sculpted by his formative experiences: "Everything that has happened had to happen to bring me to this point." Correspondingly, David expresses that his development has been: "A general evolution of coaching by being prodded out of my comfort zone, or tested by changes in context or client group." So, our coaches adapt to the expectations of others, alter because of their experiences, and evolve as a result of being challenged by changes, paralleling Schempp and McCullick's (2010) observation that experts are always learning, and constantly engaged with change, in a quest for improvement.

Consistent with Grenier and Kerhahn's (2008) plea that our consideration of expertise needs to take account of the influence of change upon ongoing and recursive development, Sam believes that we go through developmental cycles (with small ones happening all the time), working through something, and ending up back where we were, but with an unsettling of old beliefs, and often a reformation of ideas. Although sometimes this can lead to getting distracted by following an apparently interesting thread, and consequently losing sight of the basics, Sam advises that there is no discovery without exploration, and that such cycles are mostly positive, since we tend to add things to the basics once we refocus. Such a fine tuning and alteration of our practices to synch with the world around us, as a result of learning from experimentation, and our own fallibility, connects well with the notion of learning as dwelling (Plumb, 2008). However, Sam also reported exhaustion following one particularly busy period when he felt he had ploughed through too many developmental cycles in a condensed period, consistent with Grenier and Kerhahn's (2008) recommendation that we should investigate (and perhaps be concerned for) experts who operate in fields where changes are frequent.

With much to be considered, numerous factors to weigh against each other, and many sources of turbulence to be encountered, the matter of maintaining balance in regard

to coach development and coaching practice becomes a crucial matter. For David the balance and juggling of different kinds of work within his coaching portfolio is a significant challenge, and needs to be monitored carefully in terms of the overall impact on his ability to progress his further coach development. Malcolm experienced an imbalance between his international and national coaching work, causing concern that an increasing profile in the former might conceivably simultaneously impact upon a reduction in his perceived coaching expertise in the latter context. For Sam a particular critical balance is between confidence and complacency in coaching. On the one hand we can never be perfect as coaches, and so we cannot afford to be complacent about coach development, but on the other hand coaches can fail to be fully open to new ideas and learning, or susceptible to the delusion of unawareness. Thus, coaches may become stuck in the course of problem solving, or in a particular mindset, but they could also choose not to take things personally, and accept shortcomings as a chance to work on improving something.

Thus, our coaches need to make sensitive decisions about the nature of their practice, and the direction of their coach development, often off the cuff, and in response to changes, and shifting influences. Writing about phronesis, Frank (2012) describes having to understand conditions as an ongoing and difficult process, whereby there are always choices to be made, and we must constantly balance what is at stake in a changing game. Hence, Sam indicated that in coaching the game is always changing and uncertain, but he nevertheless attempts to assert a modicum of control by, for example, identifying those anchor points as a framework to guide what might most need attending to.

Having also described coaching as an engagement with a constantly changing game that demands continuous learning to promote success, in William's opinion the greatest threat to his expertise was in getting the balance wrong, what he (and interestingly Sam used exactly the same term) referred to as that homeostasis between everything. As an illustration, during this study William experienced a conglomeration of pressures that led to a period where his life was effectively in crisis, and he began acting out of character, although he has since become much more reflexive in balancing work, family, and Karate coaching. Moreover, Malcolm became

exhausted and ill after an extremely busy couple of years centred around the 2012 Olympics, that even made him consider whether to continue as an athletics coach, and at one point his international and national coaching commitments seemed out of kilter.

Homeostasis is a term usually applied in physiology to denote the proclivity of an organism to achieve a stable state by compensating for violent change in environmental and other disturbances (Martin, 2015). This seems an interesting analogy to the sports coach adapting in response to turbulence encountered on the developmental journey, although rather than inferring a static maintenance of a stable state, in this case it might be more appropriately conceived of as a dynamic upkeep of a progressive developmental momentum (such that the coaches cope somewhat with competing complexities, and yet still manage to generally inexorably move forward with their expertise cultivation). Of course, such a conceptualisation also encompasses the possibility that one's coach development could in certain circumstances feature an imbalance, or disharmony, as symbolised by Jones et al.'s (2010) depiction of coaching as occurring at or proximate to the edge of chaos, thus implicating the need for responsive and contextualised learning.

- What constitutes contextualised valuable learning in the perception of expert-like sports coaches?

Regarding this research question David's and Malcolm's stories provide an interesting contrast. While David appreciated greatly the rich learning environment, and developmental opportunities, afforded through his national governing body of sport (NGB) (and, indeed, became something of an ambassador for this organisation, and its coach education programme), Malcolm regarded the same NGB coach education provision to be too narrow, passive, and lacking individualisation. This is perhaps unsurprising given that Malcolm puts an emphasis on doing as development, and learning from trial and error, while David seems the most intellectual participant, and operates as an official mentor for other coaches. Previous literature has portrayed the knowledge development of expert coaches as idiosyncratic (Abraham et al., 2006), and coach development pathways as only partially similar and atypical (Crickard,

2013). But, while Salmela (1995) proposed that inconsistency within coach education, and coach learning opportunities, has resulted in varied and improvised pathways to reach expert status, here we witness that the attitude of the coach to the same, or similar, provision may also be influential. As for opinions on NGB coach education from the other participants, Sam made impressive early progress on NGB awards, but came to increasingly value other awareness raising courses and CPD more highly; and William makes remarkably little comment on this learning source at all, although he does cite other broader influences, and makes thought-provoking observations on personal agency in relation to CPD. Likewise, Nash and Sproule (2009) reported that current coach education did not adequately meet the wide-ranging developmental needs of expert coaches, Turner (2008) pondered whether formal coach education provision might be more inclusive and imaginative in regards to knowledge sources, and Schempp (2000) recommended that those aspiring to expertise should seek a broad diversity of learning resources. Christensen (2014) described the development of coaching experts as being characterised by personal journeys in authentic learning situations, but, given the diversity and complexity of coaching contexts, what seems authentic to the specific needs of the individual and circumstances will inevitably vary greatly, such that the journey will actively need to be carved out rather than be merely prescribed.

Reflecting a concern in the literature that experts generally (Ericsson et al., 2007; Hatano & Oura, 2003; Martinovic, 2009), and coaches specifically (Mallett, 2010; Wiman et al., 2010), should employ agency in regard to promoting their own development, William highlights the importance of his own agency in planning CPD: “Keeping control of where I’m going, and what I’m learning.” Thus, he undertakes Olympic lifting courses, completes teacher training, and intends to study a Masters in coaching. Nonetheless, he describes how he has attempted to reform the NGB coach education provision, indicating that he might not be fully satisfied with such provision as it stands, and indicates the need for a breadth of learning, and for a quality of humility as was emphasised by Charlesworth (2001; 2004), by stating: “The more I learn, the less I know.” Sam also intimates a broader and more personally proactive approach to coach learning, in that he states that coaches should go beyond qualifications, and embrace a desire to always get better and find out more, consistent

with messages about the never satisfied nature of expert coaches from Schempp and McCullick (2010). Indeed, Sam recommends that coaches should create a sense of *dissatisfaction* with their own learning, and not be passive about driving its direction: “Coaches don’t just need to be told what they need to know, they need to tell others what they need to know.”

Thus, there is an element of criticism about NGB coaching awards, which reflects concerns repeatedly expressed in literature (e.g., Nelson et al., 2006). However, such awards are typically at best short block and attended infrequently (Nelson & Cushion, 2006), so it is perhaps unsurprising they are of less influence than broader more pervasive experiential factors. Furthermore, as has been indicated by Turner (2008, p.14): “It is probably fair to conclude that NGB awards work in terms of coaching certification, promotion of minimum standards at various coaching levels, and in providing sports specific skills and drills for candidates; but do not necessarily produce highly effective, knowledgeable or adaptable practitioners.” As the participants have underlined, a more self-directed and extensive programme of education in its broadest sense, featuring diverse learning resources, would be required to promote expertise. And while NGB’s are effectively gatekeepers of the knowledge that they deem is appropriate for coaches to apprehend, coaches themselves also need to actively decide on what might be best for their own developmental needs. As such there is a parallel with Berliner’s (2001) observation that expert teachers had bootstrapped their way to higher levels where self-reliance was a key attribute. Even David, with his largely positive stance in relation to NGB coach education, advises: “There is a need to be a self-reliant learning coach.”

Malcolm’s story features a fierce independence as a learner from a young age, a strong self-reliance in terms of seeking and directing understanding and awareness. Nonetheless, he clearly values highly learning from diverse others, asserting: “You can learn from anyone.” This is epitomised by the influence of Eric Braun from his industrial mentoring background, which Malcolm describes as a crucial platform for his coaching (consolidating the message that: “You don’t know everything, and you’re always learning.”), and leading to him treating athletes as individuals, and empowering them to think for themselves, and to adopt more personal responsibility. Indeed, all the

coaches recognise the value of learning from others and the power of professional networking. Thus, while neophytes are thought to require a greater degree of assistance from more capable others than more self-reliant experts (Vygotsky, 1978), it might be that at an even higher level learners are occasionally dependent on others for their learning needs as conditions change or they enter new ground (Grenier, 2005); or as Nunn (2008) comments: “Even experts... must return for continuing education, and occasionally become novices to keep up with innovation, and some experts... never recover their expertise and mastery when confronted with changes.” (p.6). To this end Schempp (2000) proposed that those aspiring to expertise should interact with as many relevant others as possible, and Mallett (2010) observed that this vocationally situated learning could be aided by developing a web of dynamic social networks, with Jarvis (2009) referring to such a broad array of interactions with significant others as secondary socialisation.

I approached this study with a method partly focussed upon critical incidents as a means of pinning down decisive moments (Tripp, 1993) in the participants’ stories (and, sure enough, several were apparent), but, what unexpectedly emerged from the investigation was the prevalence of critical catalytic encounters with significant others in the tales. There appears to be a resonance here with Searle’s (1995) argument that physical reality may be a necessary foundation for our understanding of the construction of social reality, in that key social encounters with others seem to have been the decisive platform from which perceptions of expertise (which may effectively become a social reality for the self and others) were built. For Sam there were a crucial series of interpersonal turning points, where influential people changed the journey (from the after school tennis coach, to the semi-professional goalkeeping coach, to the tennis coach who offered him a gap year, to the HE lecturers who inspired him, to the members of the interdisciplinary team that he now works with at a High Performance Tennis Centre). Similarly, Malcolm drew much of his education from consulting with other coaches, and various professionals from outside sport, as did David when he needed to look beyond his home athletics club for coaching advice and potential mentors. Likewise, William’s coaching practice was clearly influenced by several important characters such as Vic Charles MBE, and Ticky Donovan OBE.

Whether it be critical incidents or encounters, the significance of key experiences on the developmental journey seems to be grounded in the reality of coaching (or coaching-like scenarios, such as mentoring), and thus are contextualised (promoting potential transfer). One should perhaps at this juncture attempt to identify or highlight what seem to be the most noteworthy critical incidents or encounters in each of the participant's stories. That is, those that seem to be the most influential upon their coaching and expertise, and central to their stories. In David's case it seems to be the gaining of what came to be his England Athletics mentor position, which confirmed a recognition of his expertise, ensured access to rich learning resources to be cascaded down, and also enabled him to learn from his mentees.

William's story features key critical encounters – for instance, the cricket teacher who eschewed his playing style, the Karate instructor who allowed him to spar, and the international Karate coach educator whose CPD workshop confirmed the rightness of his direction as national coach. But, it might be the cricket teacher who was unintentionally the most influential. Through his bizarre rejection of an effective, although alternative, approach to playing cricket, he caused William to give up his first sporting love. Karate subsequently came to fill the void created in his life, and William's competitive spirit to be the best that he could be, and his rollercoaster quest to alter the sporting culture, may well have been largely fuelled by that early negative experience.

Sam's most influential experience was also an early one. The specialist coaching he received from a semi-professional goalkeeper effectively opened his eyes to what coaching could be, and ultimately triggered an unbecoming as a frustrated football coach, and a becoming as tennis coach who learned to love the job. Indeed, Sam's story perhaps embodies best the metaphor of learning as becoming (Colley et al., 2003), with learning as a personally and socially embedded process, firmly grounded in specific sub cultures (Hagar & Hodkinson, 2009). Malcolm's experience of mentoring from industry was patently instrumental in the formation of his coaching philosophy, indicating, as Jarvis (2009) maintained, that we are forever becoming the product of our learning biography; but, in terms of the promotion of his later coaching expertise so were two crucial *I can do this* moments (when he added value to his son's

school football team in helping them win a competition, and when he was thrown in the deep end and had to coach international athletes off the cuff, after the head coach failed to turn up).

If we generally consider what constitutes valuable learning for these coaches, several patterns arise. While, as Jarvis (2009) asserts, we have the potential to learn from anything, predominantly, those critical encounters with key people are a feature in every story. Malcolm is immersed in learning from others, analysing high achievers, and drawing upon their accumulated practical wisdom. David also displays intentional professional networking, in tapping into a range of excellent people to inform his own development and practice. Sam puts a slightly different twist on things when he refers to interacting with a team of likeminded experts in his current coaching position, and drawing productively on each other's' expertise; while David also learns through educating others. Whatever the variation, learning from others is implicated as a potent source of interpersonal and social education for these expert-like coaches.

We can also observe self-reliance as a defining feature of valuable learning for the coaches, potentially because it is able to be contextualised to the needs and circumstances of the individuals themselves, rather than being directed from external sources. William most ably articulated the need for agency in controlling the direction of his own learning, and, thereby, promoting a self-directed development. Administrators in sport may attempt to cajole coaches towards what they believe that they should know in order to be effective, but it is likely that a far more powerful developmental momentum will be created when coaches actively strive to fulfil their own learning needs. International rugby coach Wayne Smith, in discussing his approach with the New Zealand All Blacks, provides an insight into how ownership may lift resilience, when he claims: "People will rise to a challenge if it's their challenge." (Hodge, Henry & Smith, 2014, p.68).

Hence, in Sam's story we witness the transformative embodiment of commitment and ambition, both when he initially discovers a love of football, and later when he embraces the challenge of tennis coaching. In both instances his development, as a person and as a player/coach, are sparked into phases of accelerated growth because

he simply loves it. Here the journey towards expertise receives an impulse from what Sam might refer to as learning with a positive mindset. Supposedly difficult experiences, and thorny problems become facilitative, rather than insurmountable or crushing, so that Sam refers to growth from challenging experiences, and David reports the value of good testing experiences. Conceivably, when what could represent negative turbulence is encountered, it is possible to convert it into a positive educational outcome, and David mentions how being prodded out of his comfort zone has caused his coaching knowledge and practice to evolve progressively. In accordance with this latter point, Taylor and Garrett (2010b) suggested that the habitus, as an integral part of who the practitioner is, evolves slowly as it encounters altered contexts, and unfamiliar experiences.

This is not to propose that the cultivation of coaching expertise is an easy or straightforward matter, and we can witness our coaches adopting learning strategies to attempt to deal better with the complexity of coaching. For instance, Sam works through developmental cycles to think matters through, and tries to identify stakes in the ground in order to situate his learning and practice in areas most needing attention. David advises that reflection helps to avoid developmental complacency, and critically evaluates the cost-benefit analysis of likely coaching interventions. Both William and Sam seek to focus their learning and development around evidence based interventions that are justifiable to themselves and explainable to athletes. Furthermore, all the coaches expressed in various ways their concern in regard to being able to adequately access learning resources in order to keep their expertise moving forward (back to that dynamic homeostasis perhaps?). Potentially not having access to such resources was a troubling factor related to his expertise for Malcolm, and the change in access to learning resources for David, arising from his relinquished role with England Athletics seems an ominous possible brake on his further development. Conversely, Sam expressed how much he values and benefits from the rich learning environment among the team at GIHPC.

Finally, in relation to this research question of what constitutes contextualised valuable learning in the perception of expert-like sports coaches, attention is now drawn to two aspects of learning through practical application, or, as Malcolm particularly

exemplifies *doing as development*. Firstly, our coaches seem to value and employ learning through actually putting things into practical action, such as problem solving in situ (remember that William indicated this was a natural part of the job). One example that was particularly apparent in relation to David and William was learning to deal with impression and expectation management. David had to adjust his coaching approach to deal with changes in the running culture that led to more of the athletes he encountered having unrealistic performance improvement expectations, and also highlighted how he felt he had to be a learning role model in relation to his educational position with the governing body. In the same way William had to learn how to perform behaviourally in the spotlight of being the national coach, and had to temper his approach in dealing with the associated micropolitics. Returning to Malcolm, we have an alternative spin, in that he claims that one's own coaching history can become a learning resource to refer back to. Malcolm was the oldest coach, who indicated that accumulated experiences from much doing become cases that we may productively draw upon in the future, aligning with the common observation that experts seem to be able to do the right thing (Swanson & Holton, 2001), having experienced manifold cases and their particulars (Sayer, 2011). Learning as dwelling may be useful in explaining these aspects, in that it proposes that potent learning emerges principally through engaging in practical action, as we weave ourselves into the fabric of our surrounding world, and attune with the forces within it (Plumb, 2008).

Secondly, in addition to learning through doing, as Schempp and McCullick (2010) claim that experts always do, our coaches extol the virtues of doing things differently, which implicates that they value learning through trial and error. William emphasised not doing the same old thing in coaching, and the importance of trying something new to get different results (hence his attempts to change processes, and the culture, within his sport). Sam identified that a fundamental aspect of coaching was constantly exploring better ways of doing things (such as enforcing excellence standards, and periodising the expectations of young athletes' parents), while Malcolm stated that unless coaches strive to do things differently they will not be unique in their approach in order to create the magic of enhanced athletic performance. Expert-like coaches by their very nature need to be extraordinary to stay ahead of the pack.

- How might the ongoing learning and (re)development of expert-like coaches be better supported and facilitated?

As well as general messages from their stories to inform a response to this research question, participants were asked directly about this during interviews. David believed that as coaches become more expert-like they require a shift towards more individualised, tailored, and self-directed coach learning. This links to his valuing of good testing experiences, and intentional professional networking, indicating that expert-like coaches need little encouragement to actively engage with ongoing learning, but could perhaps be supported and facilitated more readily in pursuing their own bespoke developmental experiences. For example, opportunities to move out of our comfort zone could be highlighted for coaches by coach educators (including chances to explore other related areas, and associated sub disciplines), and aids to reflection about one's coaching practice and development could be offered, or suggested. However, it could be proposed that if expert-like coaches, such as David, are already proactive and engaged learners, in touch with their own idiosyncratic needs, then we would be better off working with that agency and personal motivation, rather than telling them what they might need, or imposing *one size fits all* coach education schemes.

Correspondingly, Malcolm thinks that coach education generally is too passive and narrow for the learning and development needs of expert-like coaches, and he agrees with David that it should be more individualised, with greater facilitated networking, and specific problem solving scenarios included. These ideas reflect his own emphasis on self-reliance, learning from others, and doing as development. As previously highlighted adequate access to learning resources is something that greatly concerns Malcolm, so part of better support for expert-like coaches might be to help ensure that a diversity of learning resources are identified for practitioners, and the means of accessing them made known, or opened up to a greater extent (recommendations for educators who would seek to support the ongoing development of expert-like coaches are summarised in Chapter 6). It should be noted that the agency of the expert-like coach in relation to learning is once again implicated here, in that they would still need to choose which contacts to follow up, which problem scenarios to engage with, and

which resources to access, reinforcing Malcolm's notion that the expert coach must strive to think differently, and to be unique. If, by nature, those considered experts are extraordinary, then it is unlikely and undesirable that they could be mass produced by common, or restricted, educational means. Consequently, just as Malcolm tries to cultivate athletes who think for themselves, and are self-directed, we might expect the same of those who aspire to be, or remain, expert-like as sports coaches.

Similar to Malcolm's opinions about doing things differently, and being unique, William believes that an important consideration for expert-like coaches is to go beyond the expected role. For instance, in Karate he introduced the use of NLP, developed a graded playbook of drills, worked on footwork patterns and encouraged athletes not to simply fight in straight lines, implemented scenario based training, established normative data for Karate athletes, and identified performance indicators for competitions. Thus, better support for expert-like coaches in regard to their further development could include encouragement to move beyond basic expectations, and to be innovative, although again the choice of specific direction might best be left to the coach, in order to maximise motivation, and optimise appropriateness to specific contextual demands.

When asked directly about this research question William advised that ongoing support for experts should include content on cutting edge or emerging areas, the sharing of problem solving practices among practitioners, and encompass taking coaches out of their comfort zones. More generally, emerging from William's story are issues related to being unprepared for some challenges related to high level coaching, and a sense of isolation and loneliness in a high-profile role. William seemed ill prepared initially for getting to grips with matters related to impression management, and had to learn to play micropolitical games on the job. While we have advocated a largely individualised support for expert-like coaches thus far, they could perhaps be facilitated to become more aware of such general issues, which are likely to apply across contexts to some extent, as well as being prepared potentially by being guided to consider broad principles relating to such matters, or the examination of associated case studies detailing the similar experiences of others.

As national coach, William described being: “Isolated in an engagement with a constantly changing game that demands constant learning to promote success.” Quite a responsibility, which is ultimately all down to him, despite a support team of other coaches that partly offsets a sense of loneliness and vulnerability. Elsewhere, William expresses his fear of going down the wrong path, or being too strong willed in pursuing certain coaching interventions. Here we get a sense that expert-like coaches such as William might benefit from sensitive mentoring, to counterbalance that feeling of isolation, and to provide a critical friend, or devil’s advocate, who might help him to think through his coaching practice and development issues again, in order to consolidate the rightness of his direction. Such a mentor might be an expert-like coach from a different sport, given internal competitive pressures that are likely within the sport itself, and such support might help with William’s concerns about the threat to his expertise arising from not getting the balance of everything correct (or homeostasis, as he referred to it). Both David and Malcolm also experienced problems in the balance of their portfolio of coaching work, which somewhat threatened their perceptions of expertise.

Sam believes that broader sources of CPD, and a diversity of awareness raising courses are not adequately recognised (let alone accredited) in the ongoing development of expert-like coaches. He advocates a more wide-ranging and holistic conception of facilitative coach education experiences, which may include examples that are not even, on the face of it, directly related to sports coaching. For example, in his story we see him sensing that psychometric testing might be significant in some way for his coaching practice, even though he has yet to fully work out its importance and potential applications. In a more directly applicable case his NLP training dovetailed well with the use of facilitative questioning in coaching practice to help players find positive messages themselves. Interestingly, William similarly found NLP a useful coaching tool to be implemented in an entirely different sport.

In another indication of the need for a more holistic approach to the ongoing support and facilitation of expert-like coaches, Sam’s story featured him moving into associated areas of expertise (psychology, coach education, business coaching), and featured a much-valued rich learning environment offered by being a member of a

world class interdisciplinary coaching team. There are points raised here once again about the potential of encouraging coaches to diversify their knowledge, and, additionally, in relation to the latent power of teams of experts to facilitate further development (Salas et al., 2006). Further themes from Sam's story implicate that awareness raising should be a crucial function of ongoing coach education at high level (to mirror that notion of his about how experiences and encounters can alter the scale of how good a coach can be), that supporting coaches to be more comfortable with the unexpected as a potential learning resource might be facilitative, and that helping coaches to know well their own values and beliefs would also be likely to help them to be more stable in the face of uncertainty. Indeed, David found such an exercise on drilling down into the detail of his coaching philosophy on a Level 4 coaching course particularly useful.

Moreover, sensitive support for the ongoing learning of expert-like coaches could be of assistance in striking the balance that Sam indicates is crucial between complacency and confidence. That is, practitioners could be encouraged to not be overly contented about their current level of coach development (or as Sam described it to create *dissatisfaction*), or stuck in certain mindsets, and could be exposed to new ideas and learning, as well as accepting shortcomings as an opportunity to work on something. Furthermore, expert-like coaches could be facilitated in working through those developmental cycles that might unsettle old beliefs, and to identify those anchor points most pertinent to their work, to control the uncertainty of coaching, and direct their attention and intentionality.

Sam asserts that experts need bespoke support (contextualised to their own needs), such as working on real world situations in their own preferred way with guiding mentors. In so doing they would need a suitably receptive attitude to be open to leaving their comfort zones, and to be willing to be personally challenged, in moving far beyond standardised coaching qualifications, and embodying a desire to always get better, and find out more.

To summarise this section the participants have advocated that ongoing support for expert-like coaches' development should principally be individualised and

contextualised to the coach's needs, and build upon and feed the agency of the coach as a self-directed learner. Further (re)development should therefore be broad, wide-ranging, and flexible in terms of learning resources, including the possibility of extending into different disciplines. Generally, it is proposed that coaches should be encouraged to move beyond their current practices, to be innovative in their approach, and to move out of their comfort zone to grow further. To facilitate this the following strategies could productively be employed by educators – assisted networking among experts, establishing working teams of experts, designing problem solving scenarios, encouraging stimulated reflection and awareness raising, providing guiding principles and case studies, offering advice on how to cope with uncertainties, and mentoring. And, as a final thought, if Malcolm's assertion that your own coaching history can be a resource that can be drawn upon in current and future coaching action is correct, then expert-like coaches themselves may well be an educational resource that should be drawn upon in supporting other expert-like coaches (e.g., as mentors, in problem solving, in networking, as case studies).

- Are there common behaviours or qualities supporting the promotion of perceived expertise among expert-like coaches?

Tentative responses to this research question are presented below. While these are derived from only four stories of expert-like coaches, and may thus not necessarily be generalised more widely, they are derived from an extensive investigation, and a hopefully intimate knowledge of the characteristics of the individuals involved. Once again, the stories inform the discussion of this research question, but the coaches were also asked about this directly during interviews.

Firstly, a common behaviour or quality of our expert-like coaches is thinking deeply and differently about coaching. Experts are by their nature extraordinary individuals, for whom the status quo is not going to be enough. Hence, Malcolm questions received wisdom in relation to the training of throwers, David provides more one to one coaching in distance running, William introduces various innovations in Karate coaching, and Sam pioneers new processes related to the coaching of young tennis athletes. So, to make a significant difference to athlete performance, our coaches must study in-depth

aspects of their coaching practice, critically consider the appropriateness of coaching interventions, and innovate in order to stay ahead of the pack. Thus, for instance, David comes across as an intellectual coach, William and Sam adopt an evidence based approach to coaching practice, Malcolm draws upon the practical wisdom of others, and all of our coaches patently come to do things differently in the course of their coaching stories.

Correspondingly, all of them display an intense curiosity; what Malcolm described as a thirst for learning. This could be considered to be the fuel that drives on the coach learning journey, and feeds developmental momentum for those who become (and aim to remain) expert-like. Just as those who do not think deeply and differently about their coaching are unlikely to emerge as perceived experts, those who are not imbued with an intense curiosity are not likely to sustain sufficient thinking deeply and differently about coaching matters to develop or sustain expertise.

Such an intense curiosity naturally tends to extend beyond the narrow confines of formal coach education schemes, and leads our coaches to embrace broad and diverse learning sources, frequently extending into associated but different sub disciplines, and sometimes ostensibly going outside of the realm of coaching entirely. Therefore, to feed their curiosity, and to satiate their individual learning needs, a common quality that becomes apparent is agency in relation to their own learning. Our coaches actively seek out learning resources, and pursue knowledge that might best enhance their coaching practice. They display a self-reliance regarding learning, and an independence in relation to their coaching development. William felt it was crucial that he maintained control of the direction he was going in developmentally, and what he needed to be learning, and one could readily extend that to who he needed to be learning from.

Time and again in the stories produced it is evident that learning from others is a key quality for expert-like coaches. There are several individuals who are clearly instrumental in their influences upon our coaches, and, ultimately, what and who they become. Furthermore, critical incidents during the coach learning journey often relate to interpersonal issues, such as encounters with particular persons, the breakdown of

certain coach-athlete relationships, micropolitics, or impression management. This reinforces that for expert-like sports coaches, who operate in a highly interpersonal domain, learning is fundamentally a social activity. Becoming adept at interacting with, and learning from, others, thus, emerges as a crucial behavioural trait to be cultivated.

The next group of common behaviours and qualities relate to how expert-like coaches attempt to cope with the complexity of sports coaching. Firstly, they all become accomplished at juggling various demands, as exemplified in comments about trying to maintain a homeostasis in relation to everything. Those demands may be in relation to what aspects of the coaching process to best attend to, which client groups to principally serve, or what aspects of their own ongoing coach development to prioritise. Here a second behaviour is implicated; that is, a discriminating investment of efforts. Coaches have a finite amount of energy and time, and must make critical decisions about where to invest their efforts. This is best seen in Sam's battles to enforce excellence standards with tennis parents and athletes, without which they would be unlikely to reach the performance levels they aspire to anyway. We also see David undertaking a cost benefit analysis of which incremental gains to work on in his coaching practices, and with which standard of athletes.

Thirdly, in relation to coping with complexity, our coaches exhibit a common quality of resilience in their coaching journeys, in the face of problems or difficulties encountered. William in particular displayed a 'bouncebackability' during the sometimes-violent ups and downs of his developmental trajectory. But, David, on his more straightforward path, still exhibits a dogged determination to progress, and to overcome obstacles. Sam also indicated that the pathway to coaching expertise is inevitably an up and down one, so expert-like coaches need to be accomplished in riding the turbulence. Finally, self-knowledge is implicated as a means by which to deal with the complexity of coaching. Those who are expert-like are invariably highly experienced, and will be likely to know themselves well. Sam indicated that such self-knowledge may be a boon, in that knowing your own beliefs and values well can help coaches to be more stable and secure in an unstable game. Likewise, Malcolm pointed out that our own accumulated coaching history can be a valuable learning resource to be drawn upon, as you encounter new challenges. Similarly, Sam implicated a

heightened awareness of what coaching can be as our knowledge and experience related to coaching grows, while Malcolm indicated that a defining feature of his coach learning journey was a becoming more aware, and a growing sense of realisation.

And so, to a final two common qualities of expert-like coaches that could be suggested from these findings. There seems to be a theme of our participants being willing to move out of their comfort zones. This is undoubtedly interrelated to thinking deeply and differently, and to seeking diverse learning resources, and may be seen clearly in William's efforts to go beyond the requirements of his coaching role, in David's valuing of good challenging experiences, and in Sam regarding uncertainty and difficulty as a potential learning resource. Indeed, Sam proffered that surfing the turbulence of the coach learning journey was part of the enjoyment of the coaching challenge. David claimed that his coaching development had been a gradual evolution through being prodded out of his comfort zone, and tested by changes in context and client group. Sometimes that prodding might be by circumstance, at others by happenstance, and others still might be due to coaches deliberately moving out of their comfort zones. All of the coaches seem to be willing to be challenged and extended in relation to coaching, and to make the most of experiences in terms of growth and development, including seeking out challenging experiences, suggesting a quality of bravery and tenacity. For instance, William is soon to commence his Masters in coaching.

Finally, our coaches embody a quality of humility in relation to their learning about coaching, despite being likely to be perceived as experts by significant others. Malcolm took the valuable lesson from industrial mentoring that we do not know everything, and that we are always learning. Hence, one of his greatest fears is not being able to access learning resources to feed his further development. David valued greatly the access to learning resources that came with his England Athletics mentoring role, but considered that not managing his own further growth and development against his overall coaching workload was a threat to his expertise. William considers himself to be unfinished as a coaching practitioner, and believes that he still has a way to go in his developmental journey. In fact, he views coaching as a constant progression towards perfection, although actually attaining that perfection is unfeasible. Likewise, Sam regards coaching as a never-ending journey, and a process of constant

improvement. This resonates with Turner et al.'s (2012) recent reconsideration of expertise in sports coaching as being an ongoing process rather than a realisable destination.

5.4 Theoretical Frameworks Revisited

Two overarching theoretical frameworks were employed in relation to this study. Firstly, what might be termed a new wave of literature, across a variety of domains, emphasising a conceptual shift towards several common directions. For instance, in an emphasis on process rather than product. One can see this clearly in the stories of the participants whereby William attempts to restructure the processes within his sport, Sam tries to alter the focus more towards what young tennis athletes have to do in order to achieve their stated ambitions, David and Sam place importance on the overall coaching process as opposed to fluctuations in perceived expertise at the moment to moment level, and Malcolm and Sam describe an unending journey of becoming more aware, and improving as coaches. Complimenting such observations are remarkably similar messages about the primacy of process over product views from recent literature. In the field of expertise, Nunn (2008) extended Berlieter and Scardamalia's (1993) conception that expertise is never fully mastered, to encompass a constant becoming. Similarly, in education, Colley et al. (2003) advocated learning as a process of becoming, whereby vocational cultures transform entrants via vocational habitus, which orients them as to how to learn, feel, and be in that context. Turner et al. (2012) also indicate that the vocational culture itself is not unchanging (nor unchangeable), in that they claim that sports coaching expertise necessitates a fluid and cyclical redevelopment process in response to ever changing circumstances.

The next shift indicated by the new wave of literature is from linear to non-linear developmental conceptualisations. In education the learning as becoming metaphor (Colley et al., 2003), and in expertise Nunn's (2008) notion of a constant becoming, also open up the possibility of unbecoming, as identified in Halse's (2010) depiction of how one teacher's vocational journey was not calm or straightforward, and led to her gradual acceptance that what she wanted to achieve, or become, was not possible. Likewise, Butterworth and Turner (2014) described a journey of unbecoming of a coach unintentionally side-lined into administrative roles, while Grenier and Kerhahn's

Model of Expertise Redevelopment (2008) incorporates the possibility of individuals regressing from expertise, or unbecoming, as circumstances around them alter. Hence, we witness Sam's unbecoming as a footballer, and a potential football coach, as he comes to recognise that the specific sub culture does not match well his beliefs and ambitions, and subsequent becoming as a high-performance tennis coach. It is apparent that William has to fight hard to gain the national coach position, after initially being side-lined and excluded as an outsider with radical ideas. David's busy schedule and broad portfolio as a coach draws him away from some of his own coaching ambitions, and his recently lost status with EA may somewhat stifle his future becoming. Malcolm's greatest concerns are about not being able to access learning resources to develop further, or that his coaching work or pool of talented athletes might dry up. Moreover, we have generally seen that while the developmentally trajectories of our coaches are mostly progressively upwards, they are undulating rather than linear, and feature much turbulence due to the various complexities inherent in coaching, and attempting to juggle and balance diverse variables. This resonates with chaos theory, otherwise known as non-linear dynamics, which proposes that open systems (and coaches could easily be considered as open selves as systems) are in constant fluctuating interaction with the environment (Mack et al., 2000). Explicit links have been made between sports coaching and chaos theory (Crespo, 2009; Mack et al., 2000; Mayer-Kress, 2001), and much has been written in recent years about the complexity of coaching (e.g., Jones & Wallace, 2005). In the light of all this a process of becoming as a sports coach is unlikely to be an unproblematic or linear development, and this is reflected in the ups and downs of the participants' stories (notwithstanding that David's journey was the most straightforward and ostensibly, though certainly not entirely, linear).

A further shift in the new wave of literature is from reductionist to holistic conceptions, exemplified by Potrac et al.'s (2000) depiction of the coach as an intellectual involved in complex sociologically contextualised interactions, rather than merely a mechanistic bio-scientific technician. Similarly, Jones and Turner (2006) represented coaching as a challenging complex social process subject to diverse and interrelating variables. In the coaches' stories we see this interdisciplinary and multidisciplinary complexity where our protagonists are compelled to move into related supporting fields in order

to better support their athletes (such as psychology, strength and conditioning, or sports medicine), where they grapple with issues related to coach-athlete relationships (as in Sam's struggles with tennis parents, and the enforcing of excellence standards), and micropolitics (for instance, William's battles with the NGB Board), and when they have to critically consider the impact of specific training interventions on the overall development of athletes (such as Malcolm's concerns about young throwers and an overemphasis on heavy weight training, and David's deliberations over which marginal gains to best pursue with certain runners). Interestingly, William's story includes repeated reference to his intention to cultivate a more holistic approach to developing athletes. Sam's story makes reference to his beliefs about the need for a holistic improvement of both athletes and coaches. Likewise, Malcolm's own coach development, and coaching practice ideas, was partly inspired by his learning about the holistic development of one international athlete. David deliberately makes efforts to extend his expertise into different but associated disciplines, and his story illustrates best the challenge of balancing broad interacting variables in the face of the multifaceted complexity of the coaching role, even in a seemingly straightforward sport.

Hence, another shift implicated by the new wave of literature is that from straightforward to complex. Bowes and Jones (2006) emphasise the importance of the coach's agency and creativity in working in a complex adaptive system, and we can witness this being reflected in both Malcolm and David actively and deliberately seeking to learn from diverse others in an attempt to do things differently, and more effectively, than was the norm in their coaching contexts. Sam's journey features a series of complicated becomings as he creatively adapts to experiences and opportunities around him, and adjusts plus (re)applies his growing knowledge, skills and beliefs in serially different contexts (football coaching, tennis coaching, coach education, business coaching). William is compelled to resourcefully modify his practices and approach when he becomes national coach, to deal more effectively with issues around impression management, micropolitics, and in promoting cultural changes to support performance improvements. In regard to learning theory Taber et al. (2008) proposed that situated learning in communities of practice may be insufficient to explain rapidly emergent, creative, autonomous actions required in crisis

situations encountered. While the participants' stories certainly emphasise the power of situated learning within a community of practice (with Sam's rich learning within a team of experts at GIHPC, and David's valuing of learning resources and networking opportunities from EA, representing the strongest examples), we do also witness some crisis points that are influential upon development. William indicated that being out of his depth when coaching a repeat of a World Championship final proved to be a significant spur for heightened rigour and preparation in relation to his future coaching practice, while Malcolm benefited from being thrown in at the deep end when a head coach did not turn up for a regional training event, in what ultimately proved to be an *I can do this* moment. In discussing the notion of learning as dwelling, Plumb (2008) indicated that there are times when we learn directly from our encounters with the world, and the above may be pertinent examples of this, as may Malcolm's insistence on the importance of *doing as development*.

The penultimate shift indicated by the new wave of literature is that from universal truths to contextual contingency. Orland-Barak and Yinon (2005) advocated a more recursive, discontinuous, interactionist conception of expertise acquisition that accounts for possible regression if new roles come to be adopted, with expertise thus being relative to the context encountered. Accordingly, when William retired from competition as an athlete, and was able to concentrate more on coaching, his perceived coaching expertise initially went into a steep decline as it began to dawn on him how much he still had to learn about this altered role, and that it required a shift in mindset (from wanting success for yourself, to desiring success for others), and even a transition in identity. Likewise, when William eventually gained the national coach position his perceived expertise was depressed at first, partly due to exhaustion from the micropolitical battles to get there, but also because he had to come to terms with the intricacies of the new role, and accommodate to how best to tackle matters such as establishing cultural changes. To be fair William was the only participant to display such a regression as a consequence of adopting new roles, consistent with Orland-Barak and Yinon's (2005) contention. However, some role conflict was evident where Malcolm's international work endangered somewhat his expertise development in the national context, and where David's busy portfolio of coaching commitments may have put a brake on certain aspects of his development, such that the balance of roles

adopted may have affected perceptions of expertise and/or development in certain ways.

In education, Kilgore (2004) rejects the notion of a stable learning self, and recognises constantly fluctuating multiple selves, with learning contingent on entangled influences. From this perspective the domain and the learner are always considered to be changing (Kilgore, 2004), so that the learner is regarded as emergent (Rosenau, 1992), from small, localised, differentiated interpretations (Kilgore, 2004). This implicates a move towards contextual contingency, and reflects Sam's observation that his coaching identity will be moulded and evolve as a consequence of being exposed to certain coaching and life experiences, especially as his story featured crossing boundaries between different sports and associated domains. Likewise, William stated that certain occurrences had sculpted his coaching career. Consider also that when David became an official EA mentor, his own learning was impacted because he felt that he had to be seen as a role model for coach learning in this capacity, and, moreover, he also learnt from his mentees because of his respect for them as fellow practitioners. Moreover, David now having to relinquish that role is perceived by him to potentially endanger his capacity for further learning. So, altered circumstances, and different environments (such as Sam's team of likeminded experts at GIHPC), can indeed impact on what is learned, and what the learner becomes as a result. In this way William's and Sam's experience of the Higher Education study of coaching, for example, seemed to be a profound influence upon their development and outlook.

The final shift of emphasis from the new wave of literature is from largely rational conceptions to becoming inclusive of emotionally laden ones. For instance, in regard to learning, Dreyfus (2001, cited in Nunn, 2008) claimed that only emotional, deeply involved, and embodied persons can become experts. The aforementioned seems to also link to the Deweyan embodied perspective on learning, as an interrelationship of the cognitive, physical, emotional, and practical, in continuous interaction with the environment (Dewey, 1938). Therefore, emotional investment is implicated as a necessary, though not sufficient in itself, condition for the development of expertise. Hence, David's story alludes to him caring deeply for his trade, while Sam highlights

the importance of choosing carefully who you invest part of yourself in during coaching. William indicates that his holistic approach to the preparation of Karate athletes encompasses the emotional dimension. All of the coaches could be regarded as exhibiting an affective commitment to the coaching role, and their own ongoing development, resonating with Germain and Ruiz's (2009) reporting that emotional commitment was regarded as a personal characteristic of experts.

Overall, findings in this study seem to be consistent with that new wave of literature, across a variety of domains, emphasising several conceptual shifts towards common directions. That is, the stories of coach development towards expertise presented appear to emphasise an ongoing process of non-linear development that is holistic in nature, features complexity, and is both contextually contingent and emotionally laden.

The second theoretical framework employed in relation to the results of the current study is Bourdieu's social theory, and particularly his interlinked concepts of *habitus*, *field* and *capital* (Melville et al., 2011). Firstly, to the extent that story may be regarded as a holistic means of representation (Bowes & Jones, 2006; Douglas & Carless, 2008), that the resultant narratives represent a potent means of analysis in themselves (Polkinghorne, 1995), and that the stories produced reflect the situational and interrelational complexity of sports coaches developmental paths, then the study seems to sit well with Bourdieu's (1986) belief that we may only comprehend human practices as a holistic totality, via an integrated analytical approach (Tomlinson, 2004), and with Cushion and Kitchen's (2011) assertion that a Bourdieusian perspective may help us to appreciate more fully the complexity of the ongoing coach development process, and the multifaceted interrelationships between coach, other and context. Consider, for instance, the early influence of the ground-breaking West Indies cricket team (via his Father's passion) on William's development as a coach; through an internalisation of cultural *capital* he first invests himself in guided practice as an athlete, then he is ostracised for having a non-traditional playing style despite being effective, and later he takes this outsider reformist thinking (*habitus*) to another sporting context (*field*), and therein battles to enact cultural change.

Grenfell (2008b) highlighted that Bourdieu attempted to reconcile apparent opposites in social scientific thinking, and in the results we can observe tensions and relationships between, for instance, agency and structure (in relation to the extent to which coach education is directed by the coach or external organisations), agency and happenstance (in the entanglement of luck or fortune with the coach's disposition towards the opportunities presented in their developmental journeys), and how we see ourselves and how others see us (in issues of micropolitics, impression management, and dealing with expectations). On commencing this study I expected to discover more examples of hysteresis, that form of social culture shock (Hardy, 2008), whereby our coaches might experience a feeling of ill fit to altered circumstances around them. Although there were indications of this in some respects (such as Sam's feeling of not being comfortable in the football culture, and William being politically side-lined from the national Karate set up), it proved mostly to not be prevalent. Instead, a more creative and flexible adaptation to altered conditions was apparent, more aligned to Bourdieu's (1998) metaphor of a feel for the game.

Hence, we witness in the participants' stories a progressive sensitised ability to operate more effectively within the sports coaching domain as they accrue practical sense, an attuned mastery only deeply ingrained as a consequence of long term immersion in practice (Bourdieu, 1998), which would appear to link conceptually to phronesis as a form of accumulated practical wisdom (Aristotle, 1998). As Bourdieu (1994, p.63) stated: "The habitus as the feel for the game is the social game embodied and turned into a second nature." Thus, expertise is associated with tacit knowledge (Nash & Collins, 2006), and the expert (as per the phrominos) is guided by an internalised sense of the right thing to do in the circumstances (Swanson & Holton, 2001). However, as is evident in our stories these circumstances are changeable, or as William expresses it one is in: "An engagement with a constantly changing game that demands constant learning to promote success."

So, Bourdieu's work seems to offer a useful dynamic theoretical framework for the consideration of the lifeworlds of our expert-like coaches who are always somewhat constrained by field conditions, guided by the habitus, enabled to a certain extent by their capital, and fuelled by their *illusio* (personal investment in the stakes of the game),

in inevitably having to make a succession of critical decisions in an interrelational social setting, that will be both guided by, and gradually alter, their own feel for the game (Frank, 2012). In this sense, as Christensen (2009) argues, Bourdieu's work offers a productive framework for understanding the socially constructed logic of practice (Bourdieu, 1990) within the coaching field. But, beyond this, it also helps to draw our attention to the apparent prevalence of subtle shifts in the feel for the game that are needed by coaching practitioners, in response to change, to inform subsequent actions, as opposed to the more extreme dislocation of hysteresis (Hardy, 2008). In this sense a Bourdieusian perspective has proved particularly efficacious in illuminating how coaches must adapt during their coach development journeys, because as Sam expressed it: "The game is always changing." Furthermore, Bourdieu's (1998, p.79) observation that: "Like a good tennis player, one positions oneself not where the ball is but where it will be." signposts to the requirement for a proactive adaptation of those who would aspire to be expert-like, in order to cultivate a superior feel for the game, and a refined phronesis that informs future actions (Frank, 2012) in order to stay ahead of the pack.

One way of maintaining a progressive and creative advantage over competitors as an expert, and in regards to one's self-improvement, is to make decisions based on judgements about the promisingness of possible future directions to be pursued (Bereiter & Scardamalia, 1993; Turner, 2017).

5.5 Abductive Reasoning

To be clear, I believe that the most significant contribution of the current study is the production of rich and authentic storied accounts of the lived experience of four particular expert-like sports coaches that provides case based insight on specific examples of the development, maintenance and redevelopment of perceived expertise. However, in the remainder of this chapter I also intend to speculate about, and signpost to, the possible promise of broader theoretical inferences arising from the results of this study by employing abductive reasoning.

Thomas (2010; 2011) argues that exemplary knowledge derived from case studies is capable of being rendered legitimate via a process of abductive reasoning, whereby

looser explanatory ideas may be formed from the examination of local circumstances. Hence, while abduction does not necessarily deliver generalised full proof explanations, or water tight predictive guiding models, it does offer seemingly plausible rules of thumb, derived from the particular contextual experiences of others, which might be personally interpreted in relation to our own experiences, and, thereby, may possibly connect to our own phronesis (Thomas, 2010). In this way we may apprehend a storied appreciation of others realities, which may be accessible and relevant in relation to our own (Abbott, 1992; Thomas, 2010; 2011).

But, to clarify, I do not seek to make grand all-embracing theoretical claims on the basis of a few case studies (no matter how extensive and detailed they might be), and, instead, I intend to draw upon Peirce's ideas on abductive reasoning to suggest insights into the pursuitworthiness of seemingly believable explanatory propositions arising, to potentially be investigated and developed upon subsequently by others (McKaughan, 2008). Peirce (1903, cited in Gold, Walton, Cureton & Anderson, 2011) argued that abduction represents a promising source of new but preliminary theory building ideas, providing reasoned conjecture about explanations that might conceivably be plausible, although they would need further testing to be fully validated, and could prove yet to be erroneous. While Peirce referred to this process as giving credence to rudimentary theories on probation (Fann, 1970), Gold et al. (2011) indicate that it is not purely guesswork, since it is founded upon the observation of facts, herein drawn from the experience of local and contextualised understandings, which are at first surprising, and warrant a possible explanation. Moreover, Gold et al. (2011) claim that analogic abduction appears to fit well with Bruner's (1986) narrative mode of thinking (employed in this study), and could moreover be considered as connecting meaningfully with the style of reasoning presented below. Peirce (1976, p.64) cautioned: "Nothing unknown can ever become known except through its analogy with other things known. Therefore, do not attempt to explain phenomena isolated and disconnected from common experience." Hence, I draw upon some conceptual information from other domains below, and make comparisons with seemingly unrelated activities.

Bruner (1987) once claimed that as art imitates life, so life imitates art, implicating that the verisimilitude of narrative life stories needs to knit well within a broader community of life stories, in respect of common structures, and possible conceptions of lives as lived. In this way, if the stories produced in this study have a ring of truth, and if we accept that human experiences are often organised and shared in a storied form (Bruner, 1991; Sartre, 1967), then I would suggest that we may reasonably extrapolate from them to offer conceivable, but provisional, alternative narratives to those which currently oversimplify our conceptions of expertise development. Furthermore, having been immersed in investigating and thinking deeply about the development of perceived expertise in sports coaching for more than five years now, I can perhaps readily claim that there is some degree of substance in terms of the plausibility of tentative hypotheses which are presented below. I would additionally argue that these explanatory ideas seem to match well the data already reviewed in this study, although at this stage of inquiry they tend to account for behaviours observed rather than predict them (Svennevig, 2001). That is, they are not what must be, or what is, but what might be (Yu, 2006). Three areas of my thoughts about the nature of expertise development in the coaching domain generated via abductive reasoning are put forward – surfing the turbulence, adaptation to stress, and a developmental habitus.

5.51 Surfing the Turbulence Model

Firstly, I suggest that the developmental journeys of our expert-like coaches could be deemed to be suggestive of a model of perceived expertise development that might be termed Surfing the Turbulence (see Figure 22).

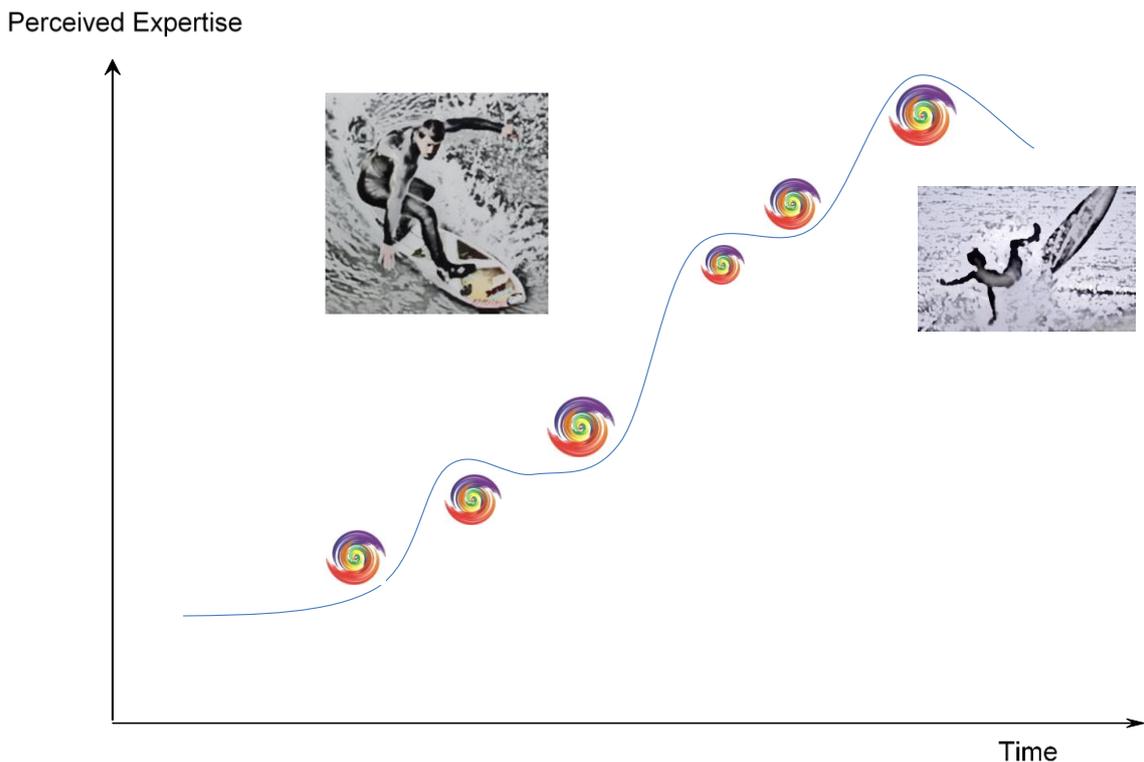


Figure 22. Surfing the Turbulence Model.

In essence, this model depicts the progressively upward, but undulating, developmental trajectory of perceived expertise exhibited by our participants. While it might be considered to be an ostensibly linear pathway overall, there are inevitable periods of turbulence to be negotiated along the way, resulting in relative accelerations, decelerations, and potentially even times of stagnation or regression, in respect of the development of perceived expertise. This turbulence could be regarded as constituted by an inextricable entanglement of happenstance and agency, as our coaches encounter and/or create a range of new experiences, such as problems to be solved, opportunities to learn, and new challenges to be faced. Each instance of turbulence may be unique in terms of the relative balance of happenstance and agency involved, whether it is more positive (enabling) or negative (depressing), and in terms of scale (powerful or negligible). But, crucially, our coaches, as committed and embodied practitioners, are able to skilfully surf the turbulence encountered, or turn it to their advantage, in riding the waves of the unavoidable ups and downs of the developmental journey; thus, effectively flattening the curves of the trajectory, so that potential fluctuations are ameliorated to become undulations.

Consequently, there may be instances of turbulence that accelerate development (akin to catching a wave in surfing), and others that depress development of perceived expertise; although our practitioners usually find a way to turn circumstances to their advantage, inexorably moving forward in the grand scheme of things. Nevertheless, there remains the ever-present danger that they might get the sensitive balance of dealing with a number of competing matters at the same time wrong, or come up against turbulence that they cannot cope with, causing a deceleration, a stagnation, or even an ending of the developmental journey (a falling off of the surfboard). Notwithstanding, while they do remain in the game, the ongoing learning and development of our practitioners appears to be defined and determined for the most part by their capacity to adapt.

5.52 Adaptation to Stress

During the course of this study I noted in my reflexive diary that I experienced an epiphany after discussing with one of the participants the analogy of coaching development as compared to the periodisation of work with athletes (that is, the division of the training year into periods of varying volume and intensity (Bompa & Haff, 2009)). It suddenly struck me that Selye's (1936) adaptation model (General Adaptation Syndrome), which is often employed in the conceptualisation of periodisation (Mann, Thyfault, Ivey & Sayers, 2010), may be useful in thinking about those everyday or moment to moment fluctuations in coaching expertise that all of the participants implicated as a common inevitable and natural occurrence.

Selye's model can be employed to consider the effect of one training session (and multiple sessions) on the fitness of the body (Haff & Haff, 2012) (see Figures 23 and 24). While the session may initially depress (regress) the system, the body will smartly adapt beyond the previous level of fitness in response. Over time several training episodes (if the athlete is committed enough to train regularly, or, in our case, the coach cares enough about their own development to do something to improve further) would result in an apparently smooth inexorable and linear progressive improvement (Haff & Haff, 2012). But, underneath would remain the masked turbulence of the effect of the ups and downs of the individual sessions (or developmental episodes). This resonates well with my previous thoughts about the developing coach as akin to a

surfer, skilfully surfing the turbulence, and flattening the curves of accelerated and decelerated development.

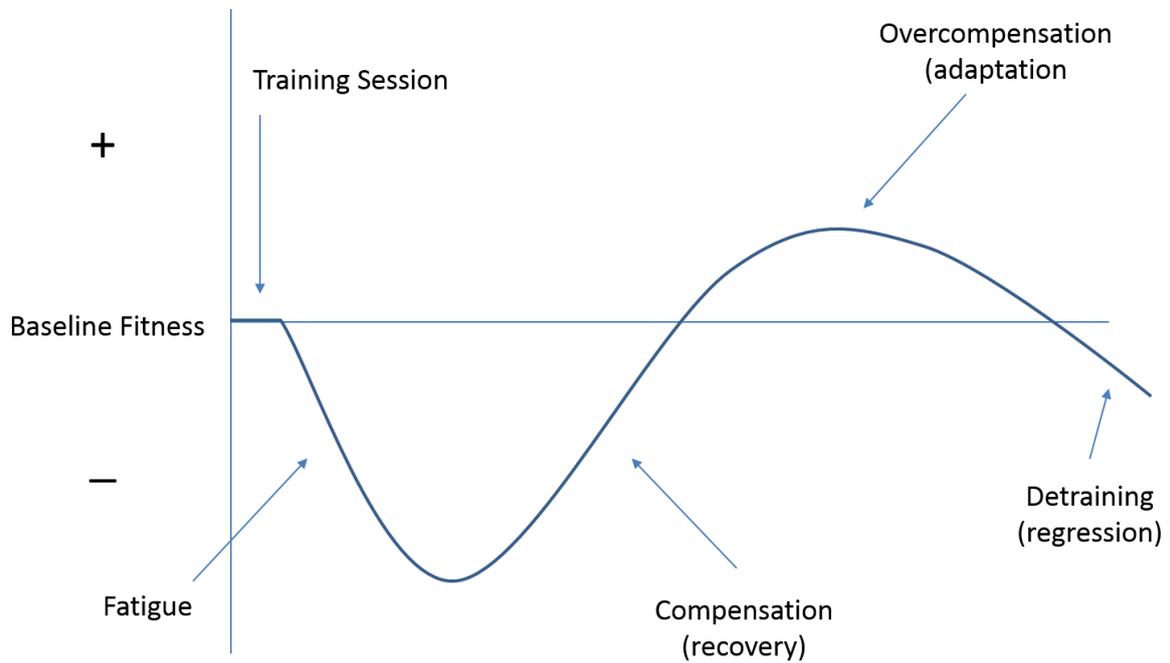


Figure 23. Selye's General Adaptation Syndrome Used to Represent the Effect of One Training Session.

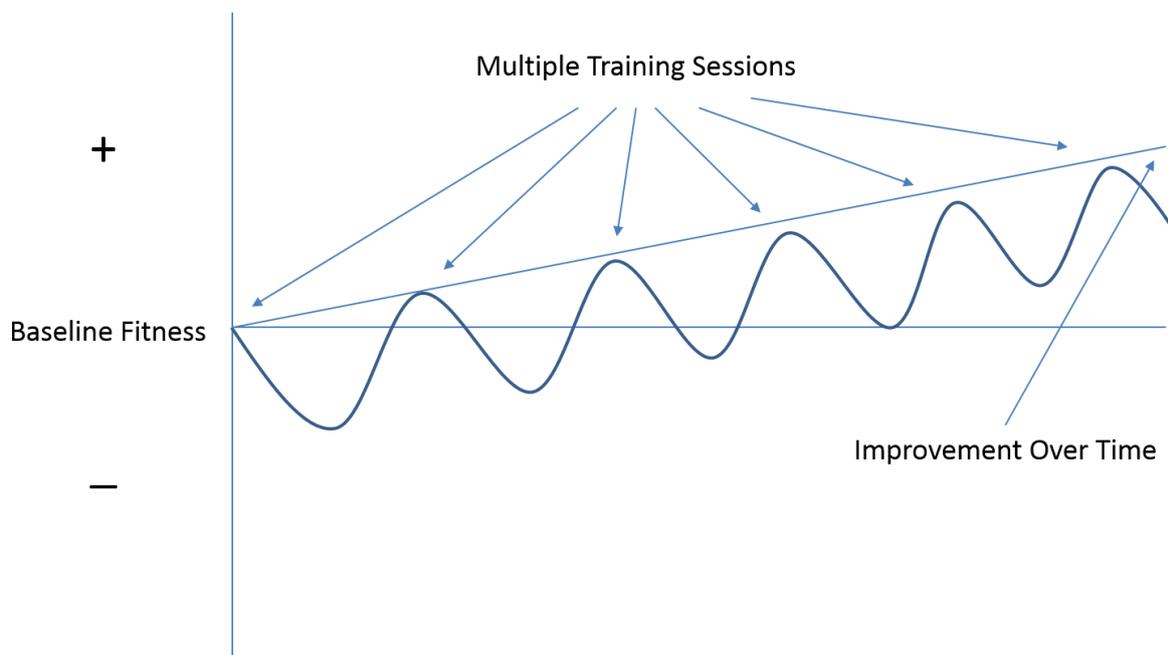


Figure 24. Theoretical Effect of Several Training Episodes.

Selye wrote extensively on stress, although mostly from a biological perspective, and later renamed his General Adaptation Syndrome as the Stress Response (Szabo, Tache & Somogyi, 2012). Noting that there are a variety of factors that can cause such a stress response, he defined a negative or unpleasant stressor as *distress*, such as that arising from resistance and exhaustion, and a stressor that evokes positive emotions or reactions, such as rising to a challenge, or wrestling with an intriguing problem, as *eustress* (Selye, 1974; 1976). Selye (1974, cited in Szabo et al., 2012, p.477) also recognised that not all stress reactions are equal, due to differences in individuals' perceptions and emotional responses, stating: "Stress is not what happens to you, but how you react to it." Thus, we might try to accustom ourselves to react better to stressful situations, or embrace chances to engage with sources of *eustress*, in seeking growth, which appears to connect well with the notion of seeking a (dynamic) homeostasis regarding the promotion of ongoing coach learning and development. An analogy that comes to mind is that of a tight rope walker, always seeking a balance in coping with difficult altering circumstances, but ever moving forward – perhaps more readily when a better balance is achieved.



Figure 25. A Tight Rope Walker as an Analogy for a Dynamic Homeostasis of Expertise (NBC Chicago, 2014).

Hence, I am proposing that Selye’s Stress Response could be utilised as a conceptual tool, in being extended to the social world, in critically considering how coaches might adapt in response to the stimuli of turbulence encountered on the developmental journey towards perceived expertise. Some suggested examples of how this might operate in practice follow (see Figure 26).

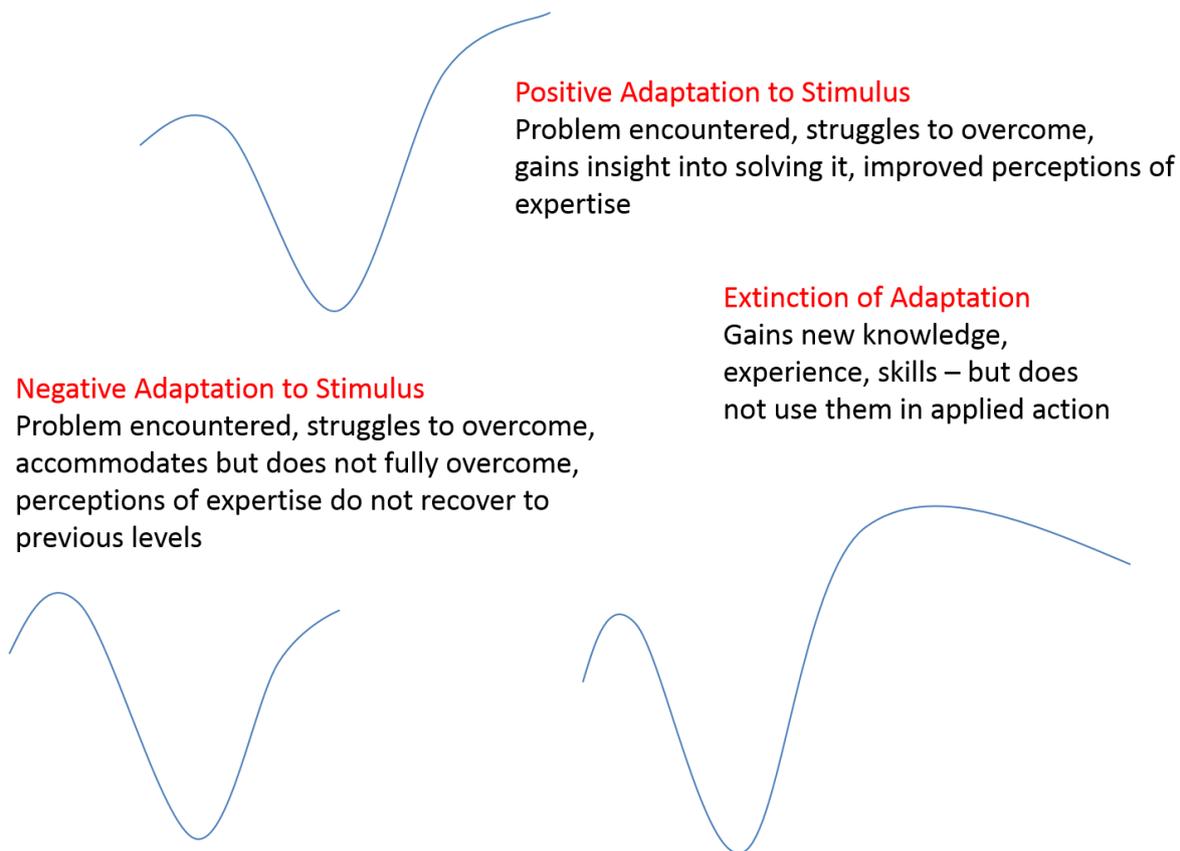


Figure 26. Adaptation to Stimulus.

In the above the example of negative adaptation could be linked to Selye’s (1974; 1976) notion of *distress*, while the positive adaptation could be linked to *eustress*, and the extinction could be regarded as a form of developmental detraining causing regression. Moreover, turbulence encountered might result in a sudden moment of insight that accelerates perceived expertise (a light bulb moment), or it could represent an issue that requires prolonged engagement with in order to find a way forward with perceptions of expertise (a slow burner). One way of conceiving of this is to think of

developmental stimuli which require long or short incubation periods in order to promote growth (see Figure 27).

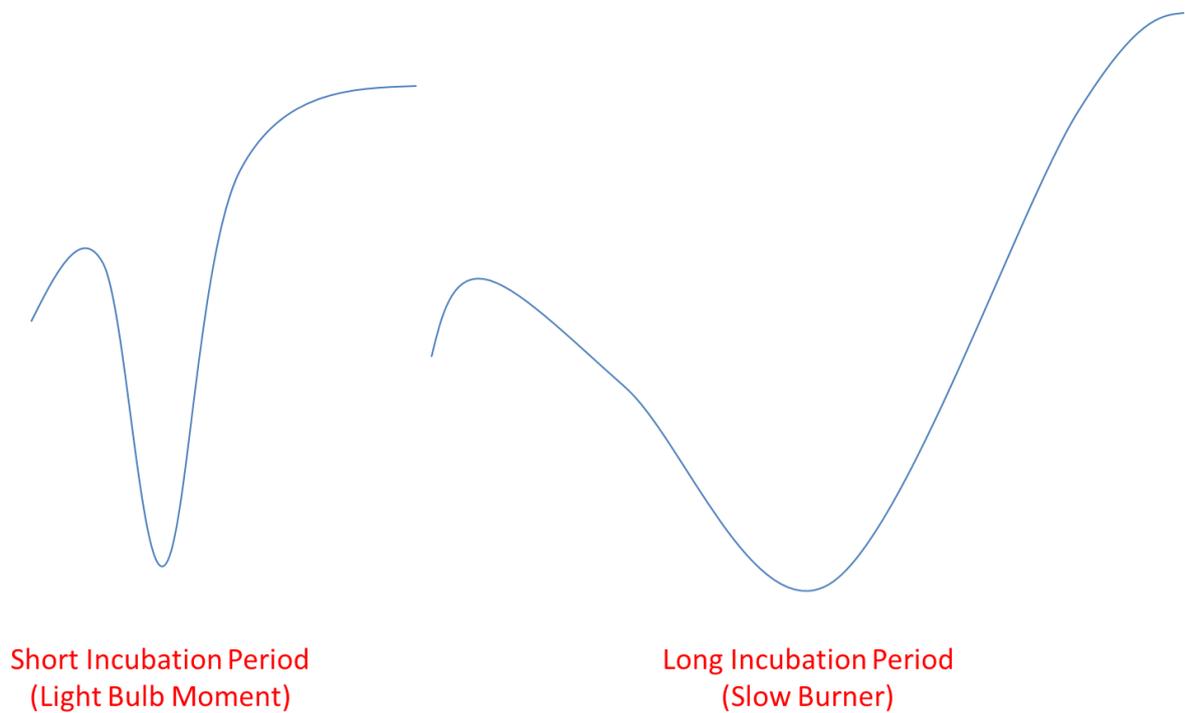


Figure 27. Short or Long Incubation Periods.

If we accept the idea that becoming an expert is not fully realisable, but that expertise is a process of constant becoming, drawn forward by the mirage of a completed end state (a carrot on a stick ever out of reach), then Selye's (1974; 1976) notion of *eustress* seems to be intriguing in relation to considering the nature of the developmental journeys of expert-like sports coaches, and how they might best promote their own ongoing adaptation and growth. This good form of stress could be deliberately and habitually engendered by moving out of our comfort zones, and seeking growth provoking stimuli, but with a particular approach and way of being in regard to self-development. What might be termed a developmental habitus.

5.53 A Developmental Habitus

It is proposed that for individuals to become, and to remain, expert-like, in terms of their self-perceptions, they would need to actively and purposely adopt a disposition

which promotes their further development and growth. Such a way of being would be required to provoke them to habitually extend beyond the ordinariness of the comfort zone, to experience some necessary discomfort in moving towards the extraordinariness of expertise, but taking care not to stray into the extremes of the trauma zone, whereby perceptions of expertise might regress as a consequence of negative experiences (such as becoming unbalanced, or feeling overwhelmed, or exhausted). Figure 28 depicts a basic representation of these possible zones of perceived expertise development.

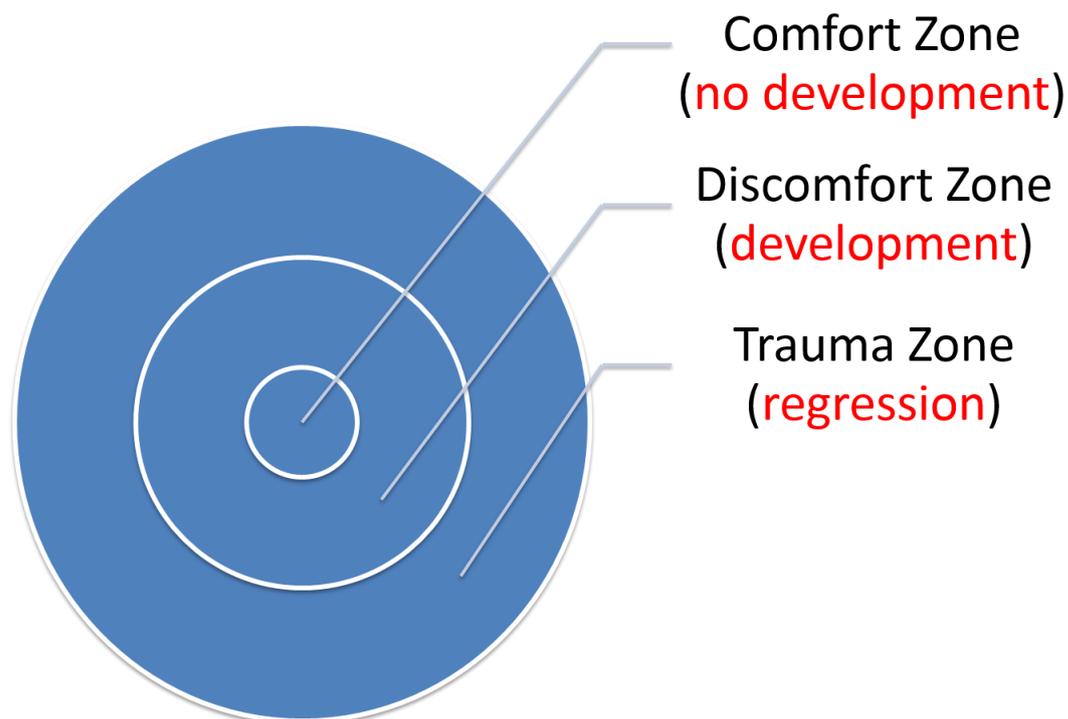


Figure 28. Zones of Perceived Expertise Development.

However, such zones would be dynamic rather than static – for instance, the initially extraordinary will inevitably end up feeling very ordinary given time. Moreover, those wishing to cultivate and promote their perceived expertise, animated to evolve as practitioners by their capacity to adapt, will tend to naturally be drawn to engage with sources of eustress beyond the comfort zone, and extending towards the trauma zone, though once again hopefully not to the extent of harmful discomfort. By incrementally pushing ourselves we may adjust and become gradually accustomed to the demands

of higher levels of perceived expertise, but, we are likely to need small increments of change for the most part, rather than experiences of extreme shock, which again could be detrimental. Hence, we are required to move beyond the comfort zone, whilst maintaining some feeling of balance and control, in a dynamic progressive form of homeostasis.

We could claim that in regard to expertise individuals are always either moving forwards or backwards, they are never remaining static. Being comfortable where you are will certainly not promote, nor maintain, expertise. In this regard we must continually move out of our comfort zone, and persistently push the developmental envelope – setting our own standards, rather than following the herd, and welcoming adversity as an opportunity to learn, think and grow. So, those aspiring to elevated perceptions of expertise might need to accustom themselves to becoming comfortable with the uncomfortable, to cultivate a sense of dissatisfaction with current levels of development, and to regard difficulty as a developmental resource to promote further adaptation. Essentially it is suggested that we are required to constantly extend ourselves, and in so doing transcend ourselves.

In this way we could claim that the promotion of perceived expertise concomitantly requires an expertise in learning, and a certain disposition or way of being in regards to growth provoking opportunities – a developmental habitus. This would be expressed or manifested in an ongoing attempt to expand the discomfort zone (see Figure 29). That is, for example, deliberately engaging with new areas of knowledge, taking on novel experiences, or using unique challenges to stimulate fresh learning. All of these would effectively expand the discomfort zone into the realms of the trauma zone, accompanied by the safety net of a committed, positive and agentic disposition towards development. At the same time, one could also attempt to shrink the comfort zone, by, for instance, reducing involvement in everyday tasks that have already been mastered, or relinquishing roles no longer provoking growth.

Each person would expand the discomfort zone in their own idiosyncratic manner, choosing where best to push into the trauma zone, and where best to shrink the comfort zone, and how best to react to the unexpected, dependent upon their

circumstances, hence, carving out their own unique developmental pathways. Indeed, one could propose that in doing so we create our own distinct journeys towards expertise, and our own particular formative stories as a product of our developmental habitus, which could be regarded in themselves as interesting artefacts of our accumulated phronesis. To quote the poet Muriel Strode: “I will not follow where the path may lead, but I will go where there is no path, and I will leave a trail.” (Holman, 2010, p.201).

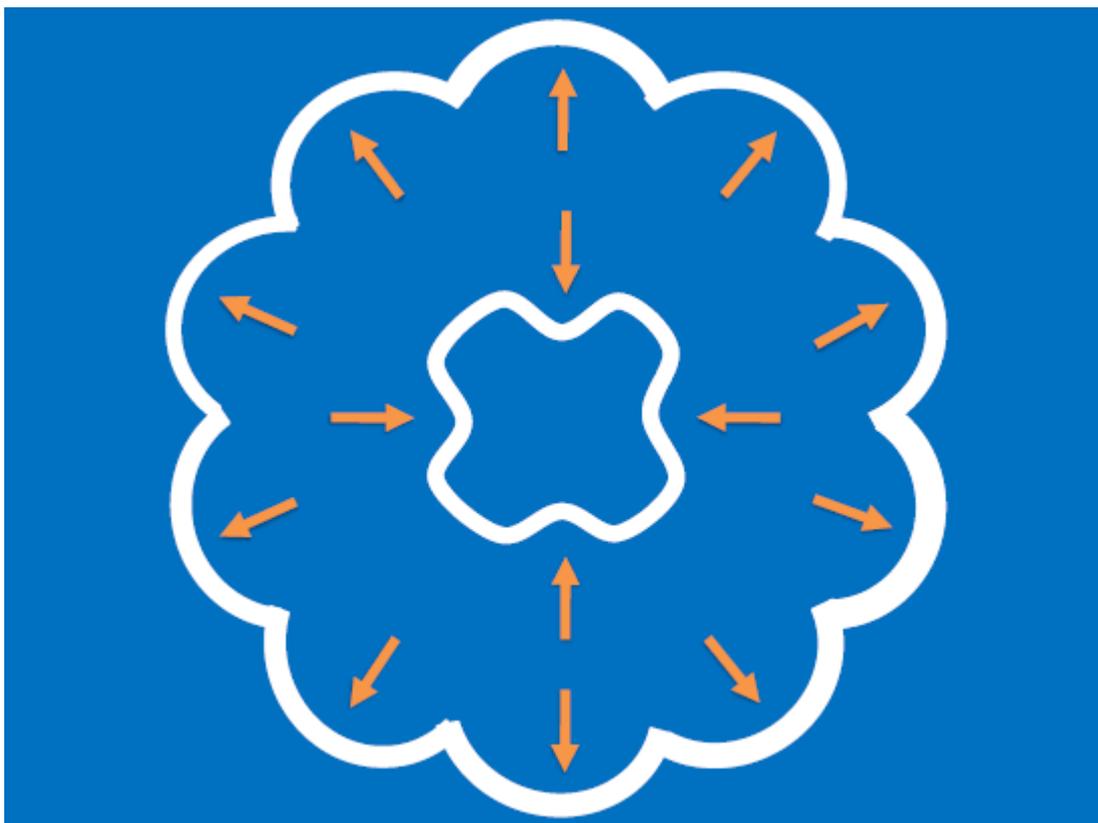


Figure 29. Expanding the Discomfort Zone.

A final point, in regard to this section on abductive reasoning and provisional claims arising from undertaking this study, is in relation to the apparently natural movement of our participants into associated but different areas of expertise (such as coach education, strength and conditioning, or business). One could regard this as a possible consequence of adaptation at the two extremities of the discomfort zone, leading to personal renewal and reinvention, in that as expert-like coaches probe new sources

of knowledge, skills and experience, and abandon roles and contexts that they have become well accustomed to, then they will tend to inevitably change what they do, who they are, and what particular interests drive and subtly shift their developmental directions. To return to the definition of expertise suggested by myself in the literature review, which encompassed the possibility of persons growing or extending into related domains: ‘Expertise may be defined as the optimal level at which a person is able and/or expected to perform, within a specialised domain and/or closely related domain, given contextual and/or developmental constraints.’

Table 11 presents the three different aspects of abductive reasoning discussed above, with examples of reliable supporting data from the current study, alongside links to existing literature.

Table 11. Abductive Reasoning Linked to Reliable Data and Existing Literature.

Aspect of Abductive Reasoning	Reliable Data From Current Study	Links to Existing Literature
<p style="text-align: center;">Surfing the Turbulence Model</p>	<p>While the timeline trajectories were mostly progressively upwards, they were undulating rather than linear, and feature much turbulence due to the complexities of coaching, and attempting to juggle and balance diverse variables. This is reflected in the ups and downs (and critical incidents/encounters) in the stories.</p> <p>Sam stated: “I think the journey to becoming a better coach is an up and down journey.”</p> <p>When David was appointed to the EA Mentor position it was a significant external validation</p>	<p>An expert’s performance may be facilitated or threatened by the situation or environment operated within (Martinovic, 2009).</p> <p>Behaviour may oscillate between more expert-like and more novice-like depending on the nature of a situation, or the impact of change (Grenier & Kehrhahn, 2008; Orland-Barak & Yinon, 2005).</p> <p>Nunn (2008) concluded expertise is temporary, dynamic, contextual, multidimensional, interdisciplinary, and complex.</p>

	<p>that also opened access to powerful learning resources – a positive source of turbulence.</p> <p>William’s story featured a large element of fluctuation in perceived expertise, and an extreme period of identifiable ups and downs. He was regarded by some as a reformer/outsider, and was consequently at times politically side-lined.</p> <p>As Malcolm is perceived by some to be a controversial character, micropolitics is a threat to his expertise. A potentially negative source of turbulence to be dealt with.</p> <p>Sam raised the notion that surfing the turbulence of the coach learning journey could be reconceived as being an integral part of the enjoyment of the coaching challenge.</p> <p>Malcolm’s international and national coaching commitments got out of kilter, and he suffered a period of exhaustion after a busy but inspiring Olympic year, which caused illness, a loss of focus in his coaching, and doubts as to whether he would continue to coach.</p>	<p>Sports coaches are in a domain complicated by its interpersonal nature (Shanteau, 1992), which demands great flexibility of practitioners (Saury & Durand, 1998), and is both contested and power ridden (Potrac & Jones, 2009). Hence, we sense how turbulent the developmental journey towards expertise might be for coaches, and how this may cause fluctuations in self-perceptions of expertise (unless they learn to ride the waves).</p> <p>There is a growing body of studies investigating coaching practitioners embroiled in messy contextual action that precludes hard and fast rules (e.g., Denison, 2007; Santos et al., 2013).</p> <p>Standal (2008) celebrated the insecure practitioner who is able to effectively balance knowledge of universals against understanding the particularities of situations encountered in exercising professional judgements. This supported by an openness to engage in constant learning and revised self-understanding, to cope better with working in conditions of</p>
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	<p>William fears going down the wrong path with certain ideas, or of being too strong willed in implementing interventions. But, he feels the greatest danger to his expertise is getting the balance wrong – that homeostasis between everything.</p> <p>Sam claims that it is only natural that perceived expertise will fluctuate, especially at the everyday level.</p>	<p>unpredictability (Standal, 2008).</p> <p>Saury and Durand (1998) found that the practice of expert sailing coaches featured constant fine-tuning to the unfolding context.</p>
<p>Adaptation to Stress</p>	<p>Malcolm’s perceived expertise is promoted by <i>I can do this</i> moments, where he is thrown in at the deep end in relation to coaching practice, and is forced to adapt quickly to novel contextual demands.</p> <p>David regarded his coach development as an incremental process – a concatenation of small events, and the incubation of ideas arising, rather than a series of major changes. A general evolution of his approach.</p> <p>As national coach William had to learn to play micropolitical games, and deal with issues of impression management.</p> <p>Sam’s journey towards expertise is one of becoming,</p>	<p>According to Gegenfurtner (2013) transitions involving changes in work context, may either compel the expert to stimulate increased performance via positive adaptation, or cause lowered performance due to lack of adaptation.</p> <p>From business Hampden-Turner and Trompenaars (2000, p.246) asserted that “It is not the fittest who survive, but the fittest, those who coevolve with their natural environment.”</p> <p>“Continuity in coaching comes not from stability but adaptability.” (Cushion, 2007, p.397).</p>

	<p>unbecoming, and becoming something different again.</p> <p>David's story illustrates that extreme busyness, and the juggling of many commitments, can potentially act as brake on further development, or a distraction from intended developmental directions. A constraint on adaptation.</p> <p>For Sam working in expert teams and catalytic encounters with others support a never-ending process of improvement as a coach.</p> <p>Sam implicated that accumulated knowledge, skills and experience are never enough, because the game is always changing.</p> <p>William described an engagement with a constantly changing game that demands continuous learning to promote success.</p> <p>William becomes a chameleon, playing the coaching role that is needed at the time to work to dissimilar athlete expectations.</p> <p>You can change the game, and you can change yourself, but you also need to remain true to</p>	<p>Nunn (2008) described expertise as an ongoing process of becoming.</p> <p>Learning as becoming links the learner to the context in an evolving transactional relationship, which may alter either or both; a shifting relational web, inclusive of the learner and context, in a process of ongoing change (Hagar & Hodkinson, 2009).</p> <p>Hutchinson and Rea (2011) claim that learning as becoming incorporates notions of transformation and reconstruction, implicating the possibility of profound change.</p> <p>Turner et al. (2012) conceptualise a shift from the expert coach as an attainable product, to the evolution of coaching expertise as an ongoing process of professional discovery.</p> <p>"Expertise can most simply be defined as highly adaptive behaviour." (Johnson, 1987, cited in Kuchinke, 1997, p.74).</p> <p>Nash and Sproule (2009, p.121) asserted: "Effective coaches are those who adapt their behaviour to meet the demands of their particular</p>
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	<p>who you are, according to William.</p>	<p>coaching environment.” With one participant expressing: “I can adapt to most situations that I come across.” (p.130).</p> <p>Coach development may be considered a self-adaptive process, driven by the agency of the coach (Wiman et al., 2010).</p> <p>From Plumb’s (2008) learning as dwelling perspective we and the world not only become, but each has the potential to transform the other.</p>
<p>Developmental Habitus</p>	<p>Malcolm is driven to promote his own education beyond NGB provision. He networks with international coaches, adopts new regional roles, and thinks differently about practice. He considers his coach development to be a never-ending journey of growing realisation, during which he is always open to new ideas. Thus, he feels that a lack of access to resources could be a potential brake on expertise.</p> <p>David is compelled to weigh carefully the cost-benefit analysis of potential marginal gains, and where best to invest his coaching efforts. He asserts tapping in to excellent people, and good testing</p>	<p>Experts are always learning, forever in a constant engagement with change, and a quest for improvement (Schempp & McCullick, 2010).</p> <p>Dewey’s (1916; 1938) embodied construction perspective considers learning to be a holistic ongoing process, involving a committed person readjusting and growing in a continuous and lifelong attempt at harmonisation with an environment ever in flux.</p> <p>Expertise is an ongoing process of becoming, rather than something to be fully attained or mastered (Nunn, 2008).</p>

	<p>experiences have best promoted his expertise.</p> <p>Chance encounters open up the possibility of an alternative developmental pathway for William.</p> <p>David believes coaches should be self-reliant in regard to their learning needs, and should create their own luck.</p> <p>With persistence, commitment and resilience William eventually fights his way to the national coach position.</p> <p>Sam believes we need to learn to be comfortable with the unexpected, and create our own dissatisfaction with current levels of development. Coaches should be able to articulate to others what they need to know, rather than being told what they need to know, and we should always be exploring further by working through developmental cycles.</p> <p>William values greatly his own agency in directing his CPD, and considers himself unfinished as a coach.</p> <p>As Sam grows more expert his conception of what coaching is/can be expands.</p>	<p>The evolution of coaching expertise as an ongoing process, and an unending journey of continuing professional discovery (Turner et al., 2012).</p> <p>Mallett (2010) reported substantial variation in the developmental pathways of high-performance coaches.</p> <p>More emphasis upon the intentional cultivation of expertise would accentuate the process or journey, and promote a dynamic expanding quality (Herling, 2000).</p> <p>In medical education Doody (2012) claimed that for advanced learners, less predictable challenges, with greater complexity, in higher stakes environments, are requisite to maximise further learning, which could correlate to attempting to extend the outer margins of the discomfort zone.</p> <p>Bereiter and Scardamalia (1993) affirm that only when an individual is willing to work at the edge of their existing capabilities, experiencing greater or new challenges, and going beyond everyday</p>
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	<p>David found himself caught up in run of the mill coaching projects that did not test his capabilities. It proved challenging losing time to more repetitive roles rather than developmental ones. He tends to work largely on his own coaching strengths, with room to work on weaknesses a rare luxury. These might represent circumstances whereby David was finding it difficult to escape his comfort zone.</p> <p>William repeatedly describes how events and outcomes helped to guide/confirm the rightness of his coaching direction, and in so doing spurred his development onwards.</p>	<p>demands, is expertise expansion promoted.</p> <p>Bourdieu's concept of <i>illusio</i> may be understood as comprehending what the stakes are in the game one is caught up in, and one's personal investment in taking them seriously (Frank, 2012. Bourdieu's concept of habitus may be viewed as akin to phronesis, in that it represents embodied practical wisdom, developed via a succession of confrontations where the stakes are high, that disposes the actor to feel the rightness of responses to circumstances encountered (Frank, 2012). The concatenation of such episodes produces a slow but sure alteration in a feel for the game, and, thus, informs subsequent actions, including developmental directions.</p>
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5.54 Originality and Universality

Consistent with the reflexivity interweaved within this study I would like to consider wider sources that might have influenced my abductive reasoning, and how my ideas presented could relate to similar notions from other domains.

Firstly, I am aware that some of the content above could be accused of being clichéd and colloquial. Phrases such as 'leave your comfort zone' and 'push the developmental envelope' are well worn and commonly employed, and do not appear to sit well in an academic setting, although this could make some of the work more accessible to broader audiences. However, they do match well the data gained, and

my speculative thoughts generated, and the participants believed the theoretical ideas raised seem authentic and coherent in regard to their own experiences.

Secondly, I am aware that elements of my abductive reasoning potentially have similarities to other sources encountered in my wider professional life and from beyond this study. For example, mindset was a term used fairly frequently in this work (even if was mostly raised by the participants), which chimes with Dweck's (e.g., 2012) recent work on a *growth mindset* in relation to learning (I am particularly aware that Sam was influenced by this writer's ideas), that could also be likened to my own thoughts on a *developmental habitus* (although I would assert that the latter is a more personally embodied way of being, beyond merely a psychological quality).

As a further illustration, White (2009) claimed that the key to the business management of performance is the management of stress, and used a model made up of a Comfort Zone, Optimal Performance Zone (which he also referred to as the discomfort zone), and Danger Zone to present his thinking, although his paper was a practical guide based on experience rather than derived from an investigative study. While White (2009) did envisage the possibility of a transition in steady state, to a new and expanded comfort zone, his model was predicated mostly on anxiety levels alone, and was less redolent of dynamic holistic change than that suggested above.

Mumford (2015), writing about the use of mindfulness to promote athletic performance, mentions comfort zones and discomfort zones (and being comfortable with the uncomfortable), the importance of incrementally pushing ourselves using the analogy of physical development, draws upon the work of Selye to emphasise the importance of adaptation to stress, and even refers to homeostasis. However, I only recently encountered this source after having formed my own abductive thoughts⁵⁰, and the remarkable similarities are nonetheless situated in very different, albeit related, contextual settings (the use of mindfulness by athletes versus the development of perceived expertise in coaches).

⁵⁰ Reference to my epiphany about the analogy between coach development and Selye's adaptation model first appears in my reflexive diary in an April 2013 entry.

Bereiter and Scardamalia (1993) focused directly on expertise (they even used the term *expertlike*), and were writing from a literacy background, but also drew upon research from psychology and learning. They particularly emphasised the need for experts to be working at the edge of their capabilities, employing progressive problem solving, and using wisdom to make judgements of the promisingness of developmental directions (Bereiter & Scardamalia, 1993).

That all of these sources have resemblances to my own abductive thoughts, even though they arise from very different directions and traditions, could be an indication of an element of universality, in that we might have a shared appreciation of matters related to expertise development (derived from research, observations, and/or experience) which could have relevance across fields and domains. On the other hand, unlike all of the above, the current study is situated in specific relation to expertise in sports coaching, my ideas generated via abductive reasoning emerged principally from the data gained therein, and taken together they seem to offer a holistic and dynamic conception that has uniqueness and originality. Nevertheless, while my work was not guided directly by the sources mentioned above (with the exception of Bereiter and Scardamalia's (1993) work, which I used within this thesis, but revisited in greater depth more recently), it is certainly possible that they could have influenced my thoughts as a part of my own broader learning biography.

As a final illustration, I have a favourite book called *Zen golf* by Parent (2005), in which a short chapter entitled '*You can't stop the waves but you can learn to surf*' advises on how to attempt to control thoughts and emotions during the ups and downs of experiencing performance golf. I have no doubt that this influenced the formation of my thinking around the surfing the turbulence model proposed, but the initial trigger was the data I gained from the participants, and the influence was below a conscious level, at least initially. Interestingly, the idea of surfing the turbulence first appears in my reflexive diary, prior to a subsequent entry that makes the link back to *Zen golf*, illustrating that the diary might have been useful in uncovering tacit knowledge.

Having discussed the results and their potential meanings in this chapter, the following, and last, chapter concludes the thesis.

Chapter 6: Conclusion

6.1 Introduction

In this chapter the thesis concludes with a reflection upon the methods employed, an evaluation of what the study has achieved (including suggested take away messages), some propositions for future research, and a consideration of my own experiences of undertaking the study.

6.2 Reflections Upon Methods

The maintenance of a reflexive diary by the author, as recommended by Riach (2009) among others, proved to be a genuinely valuable introspective tool, and captured extensive detail of thoughts about the study, including moments of powerful insight, and actions and decisions arising, in regard to the research process (Nadin & Cassell, 2006). However, entries were made as and when required, on an intermittent and impromptu basis, rather than in a regimented or mechanistic manner, keeping the process meaningful and organically responsive. For instance, I found the reflexive diary of limited utility once the stage of writing up the thesis had commenced, and so entries were drastically reduced, partly because the action of writing up and rewriting proved in itself to be a reflexive exercise. In contrast, participants did not seem to find maintaining a reflexive diary between interviews (in order to note critical issues related to their own coach development or self-perceptions of expertise, to be explored at the following interview) a particularly useful or engaging tool. Although there were some creative responses (such as one participant establishing his own YouTube channel to store reflexive thoughts), and reflexive diaries did occasionally stimulate thought and interview topics, it would be difficult to claim that this particular method was a resounding success.

The synthesis of life history and life course research methods provided rich data representing a longitudinal story of development and change over time, complimented by the visual depiction of a timeline graph of perceived coaching expertise. I was pleasantly surprised at the quality of the life histories produced by the participants, who seemed to eagerly embrace the opportunity to write about their developmental journeys, which in turn opened up areas of further exploration in the life course

interviews. In some cases this process revealed tacit influences that surprised participants, and caused a re-evaluation of the significance of formative experiences. Overall, the data gathered provided a nuanced insight into the life worlds of these coaching practitioners that I felt genuinely privileged to be given access to.

Consistent with messages from methodological literature the researcher became a crucial main tool in the research process, not only as I had a shared empathetic understanding of, and personal investment in, coaching, but because my relationship with the participants developed and evolved over an extended period. For example, with one participant I noted that our relationship initially seemed a little hierarchical, with the individual unwittingly acting out a quasi-studentship role with me, but, the longitudinal and reflexive design of the study allowed me to cultivate a more equally shared collaborative approach as time progressed. Likewise, at certain points the role of the researcher morphed into a counselling role. While, on the one hand, as a trusted confidante, I was happy to offer supportive advice to one participant who experienced something of a personal crisis during the study, on the other hand I needed to maintain an appropriate professional distance, and not to disempower participants, or overly interfere in their work or lives. For instance, at a particular juncture one coach said to me in relation to an issue in his coaching: “What do you think I should do?” To which I replied: “I think as an experienced and accomplished coach you should trust yourself to do what you believe is right in the circumstances.”

An inspirational outcome of the study design was the unforeseen extent of the benefit that participants gained from participating. While authors, such as Dominicé (2000), have indicated that writing educational biographies can benefit participants’ own awareness of their learning, and empower them in regard to future development, and I had acknowledged that participants might possibly benefit in regard to their own learning in the Informed Consent form, I had not really anticipated the potential power of this aspect (motivationally, for them, and for me), and had only considered it as a possible fringe benefit. As an illustration one participant asserted that being part of this study had aided his direction, raised his awareness of his own development, and helped him understand his own learning needs better. But all participants indicated that taking part in the study was beneficial, signalling that expert-like coaches sharing

and exploring their own developmental stories might be an untapped source of ongoing educational support in itself, and a potent means of enhancing self-knowledge.

In hindsight, undertaking a longitudinal, mixed methods, narrative based study was extremely ambitious, and proved to be a considerable challenge. While, in regards to exploring the development of sports coaching expertise, I would adhere to Gell-Mann's (1994, p.xi) generalised assertion about holistic research that: "Somebody should be studying the whole system, however crudely that has to be done, because no gluing together of partial studies of a complex nonlinear system can give a good idea of the behaviour of the whole", actually conducting and coherently drawing together such a study was akin to herding cats, and is not something to be taken lightly. In the midst of the chaos, at one stage, long into the study, I suddenly asked myself in a moment of panic, who am I to think I can craft a life history story? I will leave the reader to make a judgement on the outcome of that, and on the degree of success of this holistic exploration, but one thing is for sure it was at least a brave and effortful attempt, in which I invested myself heavily.

In respect of the limitations of this study, one must firstly acknowledge that findings arising from four individual case studies would, on the face of it, have little generalisability to broader populations. Moreover, the exclusively male sample potentially restricts the power and utility of the results for female coaches in relation to their own developmental experiences. While I have, nevertheless, argued for the possible broader value of abductive reasoning arising from the consideration of the outcomes of this investigation, these thoughts are essentially pre-theoretical and tentative in nature only. At this juncture I would also like to acknowledge a limitation related to the stories produced that I have recently become aware of. While I endeavoured to interweave reflexivity throughout this study in various ways I did not fully appreciate or account for the critical importance of relational reflexivity within a social constructionist approach (Gergen & Gergen, 1991) regarding meta influences on the nature of the stories produced. That is, dominant narratives in relation to elite sport, and in particular what Douglas and Carless (2015) refer to as the performance narrative, can constrain the possibilities of how we come to represent others' lives,

may reproduce the assumptions of the majority culture, and marginalise alternative minority stories. Thus, I may well have unwittingly reproduced existing cultural assumptions in the narratives produced associated with the dominant performance narrative in elite sporting culture (Douglas & Carless, 2015), failed to recognise the possibility of other counter narratives (Gergen & Gergen, 1991), and I sense that I could have used the voices of the participants more fully represent and illustrate their own experiences rather than trying too hard to explain their stories myself.

6.2 What Has This Study Achieved?

This study has revealed a more nuanced and realistically complex portrayal of perceived expertise development in contrast to oversimplified conceptions that currently dominate. Reflexivity has empowered the author to move past initial assumptions, such as an expectation of extreme fluctuations in perceived expertise, and of more frequent instances of hysteresis, and to explore thoughts arising in greater introspective depth. Although it is undoubtedly impossible to fully apprehend the experiences of others, the methods employed have provided rich insight into the life world of expert-like coaches, and it has proved to be both an honour, and a weighty responsibility, to co-create and craft the stories of these exceptional practitioners.

This study seems to constitute the first ever combined use of life course and life history research methodologies in the realm of sports coaching, and, thus, the first in-depth extensive longitudinal study of the development of perceived expertise on a multiple case study basis to be undertaken in this area. Though it should be noted that individually other authors have tracked life histories (e.g., Duarte & Culver, 2014), employed a biographical approach (e.g., Christensen, 2014), used a less extensive longitudinal approach (e.g., Potrac, Jones & Armour, 2002), or adopted a snapshot approach to studying expert sports coaches at a particular moment or moments in time (e.g., Tharp & Gallimore, 1976; Watts & Cushion, 2016). Furthermore, the emergent qualitative design, and long-term nature of the study, resulted in the evolution of timeline representations of perceived expertise development, and the adoption of abductive reasoning in order to propose tentative theoretical musings arising, both of which could be regarded as significant methodological contributions.

As to the importance of the study, this uniquely longitudinal exploration of the lived developmental journey of expert-like coaches provides illuminating detail on the process, influences, and continuation of expertise development. In particular it has uncovered a more complex conceptualisation of expertise development, encompassing the importance of change and adaptation upon ongoing and recursive (re)development (Grenier & Kehrhahn, 2008). Essentially the stories of the lived developmental journeys of these expert-like coaches provide an authentic portrayal of dynamic messy reality that provoke a reconsideration of expertise development as more complex, unstable, and contingent upon contextual change than has been previously appreciated.

The road to expertise is exposed as an unending journey of ongoing professional discovery (Turner et al., 2012), that is both lengthy and convoluted, and the stories produced have revealed an accessible holistic picture that other practitioners can connect with, and draw guidance from, in potentially informing their own flourishing (Reason, 1996). Moreover, we have gained valuable insight into how expert-like coaches might be supported and facilitated in their ongoing learning and (re)development.

The stories, in and of themselves, seem to be potent resources for those interested in the development of expertise in sports coaching (see Table 12 for some suggested take away messages), and could be considered as inspiring artefacts of phronesis, in that they detail how the protagonists accumulated perceived expertise, and portray the gradual accretion of practical wisdom. Moreover, the abductive reasoning undertaken as a consequence of the study provides speculative principles to guide those who might aspire to expertise, and to educators hoping to facilitate and support the promotion of human flourishing, and a surpassing of the self (Bereiter & Scardamalia, 1993). Intriguingly, these principles derived from abductive reasoning based upon data from a limited sample of expert-like sports coaches could potentially also feature an element of universality. That is, they might prospectively prove to be applicable to other domains where expertise could be developed.

Table 12. Suggested Take Away Messages.

<p>For those aspiring to develop expertise in sports coaching...</p>	<p>Accumulate knowledge, and experience, and hone problem solving skills.</p> <p>Cultivate an intense curiosity, and an attitude of always trying to get better.</p> <p>Become adept at learning with, and from, others.</p> <p>Think deeply and differently about coaching.</p> <p>Be willing to be challenged.</p> <p>Develop resilience in the face of problems or difficulties encountered.</p> <p>Leave your comfort zone.</p>
<p>For those who are already expert-like coaches, and would seek to develop further...</p>	<p>Exercise self-reliance and agency as a learner.</p> <p>Embrace broad and diverse learning sources.</p> <p>Learn from others with practical wisdom.</p> <p>Go beyond expectations.</p> <p>Create dissatisfaction with your current level of development.</p> <p>Be innovative and unique.</p> <p>Expand your discomfort zone.</p> <p>Be prepared to cross boundaries into related domains.</p> <p>Know your own capabilities, values and beliefs well.</p> <p>Accept shortcomings as an opportunity to work on something.</p> <p>Maintain open mindedness, and humility – consider yourself unfinished.</p> <p>Work through developmental cycles to unsettle old beliefs.</p> <p>Identify anchor points to highlight priority areas.</p> <p>Develop a discriminating awareness of where best to invest effort.</p> <p>Critically evaluate the cost-benefit analysis of likely coaching interventions.</p> <p>Be comfortable with the unexpected as a potential learning resource.</p> <p>Become accomplished at juggling competing demands.</p>

<p>For educators who would seek to support the ongoing development of expert-like coaches...</p>	<p>Utilise the agency of the coach as a self-directed learner.</p> <p>Ensure coaches can make active choices about their development.</p> <p>Provide individualised, tailored, contextualised learning opportunities.</p> <p>Highlight opportunities to expand the discomfort zone, and explore cutting edge areas.</p> <p>Offer possible aids/stimuli to encourage critical reflection, and awareness raising.</p> <p>Highlight common issues expert-like coaches might face, and related guiding principles/case studies.</p> <p>Provide assisted networking among experts, and teams of experts.</p> <p>Build a bank of real world problem solving scenarios to be shared.</p> <p>Utilise expert-like coaches as an educational resource to be drawn upon in supporting other expert-like coaches.</p> <p>Offer sensitive mentoring to offset the pressures of high level coaching.</p> <p>Develop a more holistic conception of potentially valuable coach education experiences (including from other domains).</p> <p>Highlight, and ensure, access to broad, wide ranging, and flexible learning resources.</p> <p>Provoke consideration of how best to adapt to changes, and cope with uncertainties.</p> <p>Encourage expert-like coaches to share and explore their own developmental stories.</p>
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6.3 Future Research

Future studies could explore how other expert-like sports coaches might react to the stories produced herein, and in what ways they might find them useful. Likewise, it would be interesting to investigate how other expert-like coaches might react to the abductive reasoning ideas presented, and the extent to which these might seem authentic and useful. To extend both of these suggestions more broadly, it would be

fascinating to examine if any of the practitioners' initial indications of usefulness were subsequently translated into actual benefits in relation to coaching and/or coach development practices. More broadly still, might the stories, and abductive reasoning ideas, have utility for genuinely guiding the development of expertise in domains other than sports coaching?

6.4 My Own Experience of the Study

Finally, as the author and researcher I have undoubtedly expanded and explored my own discomfort zone (and at times the trauma zone) through undertaking this study, and the findings have already significantly informed and enhanced my own practices as an educator. For example, I have already used several of the ideas, theories, and notions considered in this project to help better promote the development of my students both academically and vocationally. As a specific illustration, Bourdieu's thinking tools, and the concept of phronesis, feature prominently now in my educational materials employed with advanced sports coaching students. Moreover, many students have already eagerly embraced the concept of actively choosing to leave the comfort zone in self-determined directions, to promote their own unique development.

More generally, I have gained a much-needed sense of professional renewal and refreshment from undertaking this study. Hence, as I conclude this project, another stage of my own developmental journey comes to a close, and becomes a further influential part of my adapting learning biography. But, consistent with messages within this thesis, I remain under no illusions that this is merely a waystation, rather than a terminus.

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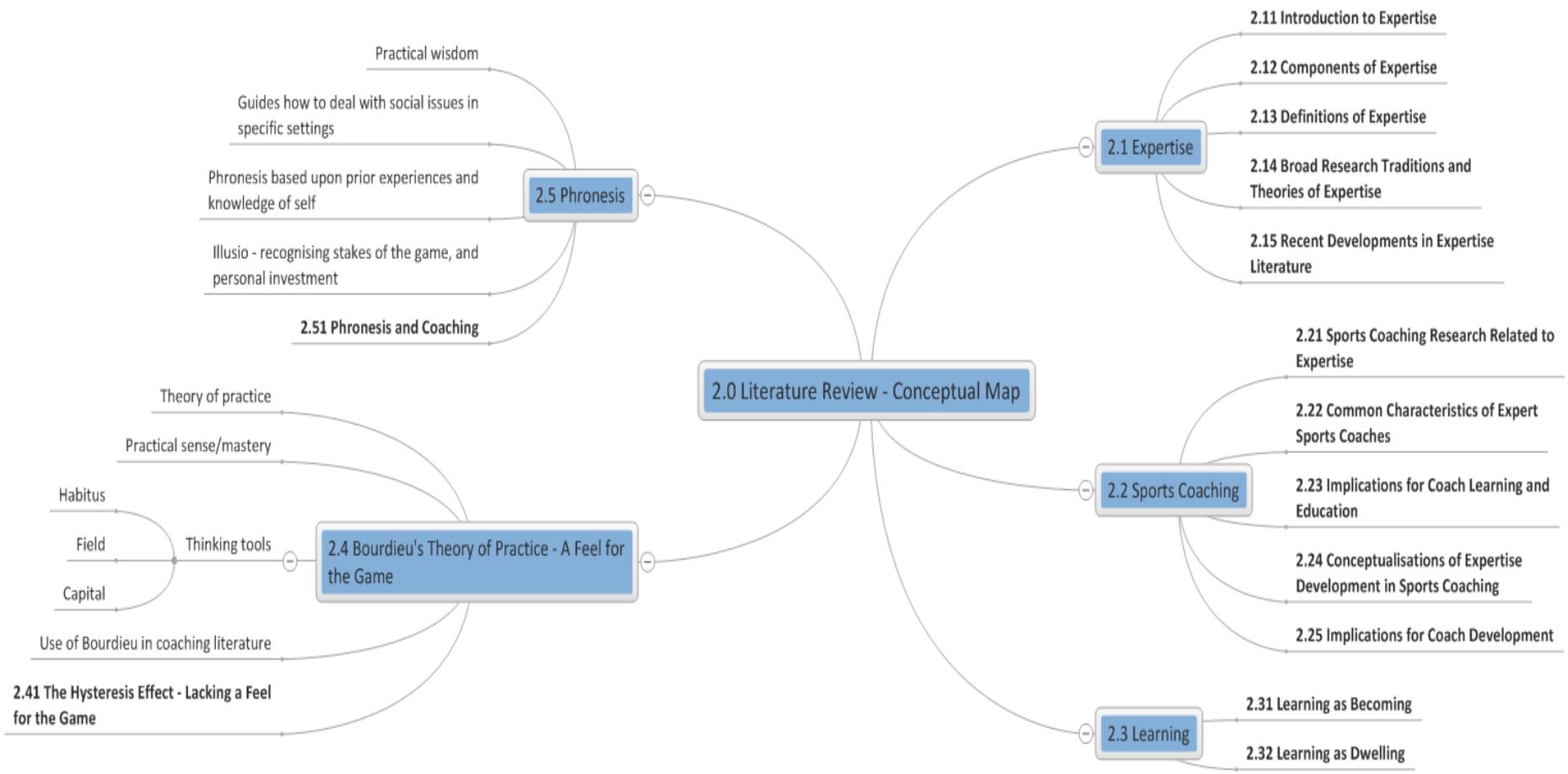
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Appendix A – Conceptual Map of Literature Review Structure



Appendix B – Highlighted Examples From Reflexive Diary

An extensive reflexive diary (~ 60,000 words) was employed in the current study, and proved genuinely useful for reviewing the research process, getting ideas down for later analysis, and reflecting upon experiences and feelings. It was found that completing entries 1-3 times per month seems to be more appropriate in order to pick up major themes or important issues, rather than daily or weekly contributions which could lead to an overly mechanistic, repetitive, and onerous process. Indeed Bourdieu cautioned against 'diary disease' whereby researchers can become overly preoccupied with second guessing their own analyses (Bourdieu & Wacquant, 1992). Nevertheless, while some of the content proved to be merely reflective or descriptive, there were several moments of authentic reflexive insight where assumptions were interrogated, or thoughts were reframed. Three highlighted examples from my reflexive diary follow.

- 1) I was able to make and explore a conceptual link between powerful interview content from a participant, where he discusses how being part of the study has helped bring his perceptions of himself closer to who and what he is as a coach (interestingly this arose from him using the transcript as a form of reflexive tool), and a section of a recent famous sports coach's memoir related to how psychologist Carl Rogers' work around personal empowerment in *On becoming a person* had influenced his coaching/leadership style. Rogers developed techniques for nurturing the real self rather than the idealised self we think we are supposed to become, and described how the key to this was developing an honest and authentic relationship focused upon fostering personal growth. "The more I am simply willing to be myself, in all this complexity of life and the more I am willing to understand and accept the realities in myself and in the other person, the more change seems to be stirred up." (Rogers, quoted in Jackson & Delehanty, 2013, p. 92). What is being communicated here seems to be a message that might be summarised as - *be yourself, accept yourself, change yourself*, and this relates well I believe to my relationship with the participant, how the study seems to be helping him partly resolve his idealised self and who he really is, and how this in turn seems to be promoting positive change in his

coaching work, and possibly even beyond in the balance of his broader life. This seems immensely powerful, and raises questions about the appropriateness or place of an almost therapist like role, or aspect of my involvement, as a researcher within this study. Etherington (2004) claimed that to recount our tales is to potentially re-evaluate or alter ourselves, so by evoking and listening to the stories of participants it might actually prove hard to avoid such a function.

- 2) During an interview with another participant, featuring some particularly articulate, well thought through, and insightful responses, I had something of an epiphany, which I further developed upon later in the reflexive diary. We were discussing the analogy of coaching development as compared to the periodisation of training work with athletes. It suddenly struck me that Selye's adaptation model (General Adaptation Syndrome) may be useful in thinking about everyday fluctuations in coaching expertise. The participant had claimed that moment to moment there may be more fluctuations in coaching expertise, as you may follow wrong paths, or get distracted by details. Selye's model describes the physiological effect of one training session. While the session may depress (regress) the system from its normal functioning, the body's response will adapt beyond the previous level of fitness in time in response (bounce back/overcompensate). Over time several training episodes (if the athlete is committed enough to train regularly, or the coach cares enough about their own development to do something to improve themselves) would result in an apparently smoothly inexorable and linear progress of improvement. But underneath would be the turbulence of the effect of the individual sessions (the ups and downs of adaptation).

This seems to link very well to my previous thoughts about the developing coach as analogous to a surfer, skilfully surfing the turbulence, and flattening the curves of accelerated and decelerated development. It should be noted that this represents an interesting shift in thinking in relation to the research questions for this study, in that rather than expert-like coaches actually experiencing fluctuations in their perceived expertise as was anticipated, they

seem to be exhibiting and experiencing undulations, consistent with the above thinking.

Another interesting aspect that came out of transcribing this same interview was the idea of thinking things through or researching/experiencing aspects, and then coming back to where you were before but seeing the situation anew. This reminded me of a poem, that I later shared with the participant, about arriving somewhere familiar but seeing it as if for the first time, because the person has been changed by their experiences.

*We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.*

T.S.Eliot

In regards to expertise this also reminded me of the belt rankings in judo (linking to my own previous experiences as a judoka). Few realise that there are further belts, indicating Dan gradings, beyond the famous black belt. At the very highest level of 12th Dan, the belt is white as per the novice, but is twice as thick (presumably to indicate the greater accumulation of experiences?). There seems a nice humility, and closing of a developmental cycle here, and it appears to resonate well with the participant's thinking in this data.

- 3) Arising from my contemporary experiences of marking coaching students' three year assignments reviewing their own educational journeys as coaches, in which some incorporated images/analogies, such as Moon's brick wall view of coaching knowledge, Moon's network map of coaching knowledge (see Werthner & Trudel's 2006 paper on understanding how coaches learn to coach), and timelines incorporating critical incidents in coach development, I had an idea about incorporating an image based task alongside the interviews (a timeline graph of perceived coaching expertise over the coach development journey). This seemed as though it might make an excellent reflexive learning task for participants to undertake between interviews, and provide us with a

useful visual representation to stimulate further discussion. This appeared to prove a successful addition to the study design.

Appendix C - Reflection and Reflexion (as presented to participants)

Reflection and Reflexion

Reflection in sports coaching involves us thinking again critically about our coaching practice and what we do as a coach.

Reflexion involves us in additionally questioning the beliefs and assumptions that underpin those reflections upon what we do and how we do it.

In other words we attempt to uncover our own preconceptions and ignorance, in order to move forward or progress. While it is of value to notice what we notice about our coaching (reflection), it may be even more insightful and powerful to notice how and why we noticed it (reflexion).

As an article I recently read puts it *“To be reflexive can actually nourish reflections as introspection leads to heightened awareness, change, growth and improvement of self and our profession.”*

As an example, I was in charge of a semi-professional football team in an important match in front of a fairly large crowd. Late in the game while clinging on to a hard fought draw, I noticed that the team formation was wrong, and that a couple of players were way out of position. Immediately irate, and about to bawl out the team, I attempted to keep calm and asked the Captain while the ball was out of play for a throw what on earth was going on with the team shape. He apologetically indicated that one of the players was struggling with cramp, and they had moved him out to the wing from central areas, while another (fitter) player had been called back to drop in between the defenders and midfielders in order to man mark the opposition's most creative player who was suddenly playing in a more advanced position in a last gasp effort to secure a win.

My first thoughts had been anger that we were not sticking to the game plan, I also reflected upon the fact that our communication between the team and bench needed to be better, and that this was something we needed to work on in future. But I also thought it was valuable that the team had been so aware and responsive to change despite fatigue, and that this fitted well with my expressed philosophy to develop athletes who are capable of making critical decisions themselves on behalf of the team in the heat competitive action. “OK. Well done. Just make sure you keep the bench informed of changes.” I said to the Captain. My initial reflections were about the extent to which they were following coaching instructions, and how bad this looked in the public arena, but my reflexive stance was about the long term process of cultivating thinking athletes who can be creative and autonomous, and avoid coach dependency.

I had to get past my initial reflections, which were based on assumptions of a lack of discipline or control, and engage with reflexion about this being a possible (or desirable) outcome arising from my own coaching philosophy and practices.

Appendix D – Informed Consent Form

University of Hertfordshire
Department of Education
Doctorate in Education (EdD)

INFORMED CONSENT FORM

Thank you for agreeing to consider taking part in this study, which explores **changes in the self perceptions of expertise among expert-like¹ performance² sports coaches in their developmental journeys**. Your participation is entirely voluntary, and you can withdraw from the research process, and/or withdraw your data, at any time without explanation.

To participate in this study, you need to broadly match the recognised criteria of an expert coach (see reverse), but more importantly have a thirst for learning, and an interest in your own ongoing coach development, that leads to a willingness to participate in a study which may well (although not the principal reason for undertaking it) benefit your learning.

Participation in the study involves the following commitments:

- Production of an **initial brief written piece** on 'my coaching development journey so far'.
- Maintenance of a written, audio, or filmed **diary** (your choice) regarding your ongoing coach development, and perceptions of expertise (suggested minimum of one entry per month).
- Participation in a **series of interviews**, at a time and place of your convenience, over a 2 year period (suggested 3 per year maximum, of around 1 hour each).
- Production of a **summary brief written piece** on your coaching development journey experience while a participant in the research process, consideration of possible alternative coaching developmental journeys that you might have experienced, and looking forward to possible future developmental journeys.
- Possible **sharing of stories** of developmental journeys, with other participants in this study, via an anonymised online forum.

Interviews and diary entries may be recorded. Responses will be kept strictly confidential. Personal details and data collected will be stored in a secure manner. Data will be used in writing up the doctorate and/or publications, but identifying information will be removed. Participants can be fully assured of anonymity, although they may alternatively choose to share their stories with others in the future. Thus, the identities of participants will be safeguarded throughout, unless they later specifically choose to share their stories in an identifiable capacity (in which case further consent will be sought and must be agreed).

Should you have any questions or concerns, feel free to contact me via email at d.j.2.turner@herts.ac.uk

In signing this form, to show that you have read the above information and are willing and committed to participate, you are not waiving any legal claims, or rights.

(Sign name) _____ Age _____

(Print name) _____ Date _____

¹ Expert-like refers to coaches who are more towards the expert end of a conceived novice-expert continuum, and who would largely conform to traditional criteria associated with coaching expertise.

² Performance coaching = coaching athletes who are preparing for competition, as opposed to merely participating for recreational enjoyment.

Appendix E - Guiding Questions for Writing 'My Coaching Development Journey So Far'

Guiding Questions for Writing 'My Coaching Development Journey So Far'

Firstly, please relax. This is about you and your own journey – you cannot get it wrong, and nobody is judging the quality of your account.

Below are six guiding questions to help you to establish a focus for your writing. But they are a guide only, not a prescription. So while I suggest you initially work around them, feel free to go beyond them, or go in other directions as you see fit in telling the story of your coaching development.

Can you outline your coaching development journey so far?

What are some of the critical incidents¹ or defining moments² in your coaching development journey?

When have you perceived yourself to be more novice-like, and more expert-like³, in your coaching development journey?

Who are you as a coach?

Where are you currently on your coaching development journey?

Where might you be going in the future?

Finally, can I invite you to read my own coaching development story, which was produced to the above guidelines; and Phil's coaching development story, which was not produced to the above guidelines. These examples may give you an idea of what the end product might look like, and contain. You may write as little or as much as you wish. You do not have to write it all in one go – and some element of reflection might be useful before producing the finished article.

¹ Critical incidents are defined as events or issues of significance in relation to coaching development; either positive or negative, or seeming to stand out as being of importance. Selection and interpretation of these may allow us to heighten awareness of our own developmental journeys, and see them in a clearer light.

² Defining moments are considered to be particular happenings, at specific points, that either accelerated your coaching development, or hampered it.

³ The following definition may be of assistance here: - An expert tends to display highly adaptive behaviour, and employs a dynamic combination of knowledge, experience, and skills, as well as a commitment to ongoing practice and learning related to the domain, in order to promote effective and efficient performance that is generally superior.