Back to front coach-learning, a personal reflection on the research journey

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Keywords: Coach Education, talent identification, reflection on research processes

Prologue

Over the past years I have found myself on a research journey which has encompassed successful completion of my PhD, publication of academic papers and industry reports, the mentoring of fellow staff, and supervising Postgraduate and Undergraduate students conducting their own research deliberations and presentation of data. This paper highlights the culmination of one journey and the start of a new one - a journey which has become more informed and reflective as it has developed due to the path I have been down over the past 8 years. Here I present the final interpretation of an initial idea: The Epistemological Chain, followed by personal reflection [after the references section]. Thus *Back to front coaching* is essentially an article within an article, that is, my final work from a series of publications: *The final study: epistemological chaining across the talent pathway* is bookended by this Prologue and in closing, some personal reflections in an Epilogue. Both are an acknowledgement to the inevitable tide-changes in my approaches to research which begins to take me full circle on my learning journey. I say inevitable – that is only in retrospect… The endeavour is to highlight the significant change of focus that has occurred, showing my realisation and renewed awareness of the humanistic and sensory areas available for exploration in sports research.

The notion of the Epistemological Chain has been the thread running through all my previous publications ranging from holistic coaching practices, coaching knowledge, decision making, coach education, talent development, parenting elite athletes, and research methods. My initial construct, nurtured and guided by friends and colleagues and Professors has evolved from an individual coaching reflection tool or framework into the organisational assessment tool it has been used for in the study below. It has, in various forms been tested, validated and explored and its merit for newly qualified, developing and experienced coaches is now accepted. What is presented below therefore, is the final chapter in terms of interview content analysis but as will become clear in my reflections, this is just the beginning of my new research journey….

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The Final Study: Epistemological Chaining Across the Talent Pathway

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Abstract

This study explored the existence, application, and coherence of the epistemological chain (EC) construct across a British sport's talent pathway. The high performance director, six National coaches, and 12 players from the pathway were recruited. We employed qualitative methodology to gain understanding of participants' perceptions and application of the pathway elements. We analysed behavioural differences between coaching levels with reference to an inter coach EC of decision making. Results suggest an inter coach EC present within the talent pathway. Interesting issues arise regarding the '3 C's' of consistency, clarity, and coherence which appear to be related to the efficacy of the pathway.

Epistemological chaining across the talent pathway

Within sport there has been considerable debate concerning the nature of talent (Abbott and Collins, 2004) its relative stages (Balyi and Hamilton, 2000; Côté, 1999; Ericsson, Krampe, and Tesch-Römer, 1993), and the most appropriate methods for its development (Baker, Côté, and Abernethy, 2003; Balyi and Hamilton, 2000; Bompa, 2000; Collins, 2011; Ericsson and Charness, 1994; MacNamara, 2011). In an attempt to clarify guidance on best practice, Martindale, Collins, and Abraham (2007) proposed a template detailing the key features of effective Talent Development Environments (TDEs) encompassing long term aims and methods, wide ranging coherent messages of support, emphasis on appropriate development - not early success, and individualized, ongoing development. However, because this was a useful contribution for developing effective TDEs, the responsibility of articulating a clear and coherent talent pathway which includes each of these elements rests with each sport's National Governing Body (NGB). Accordingly, the NGB must lay down progression guidelines, working practices, and the aims and objectives for the various stages through which developing athletes will pass. Of course, in order for working practices within such an environment to be effective, coaches must understand, commit, and adhere to the process. This process may break down, however, if these guidelines clash with the coaches' own deep held philosophies. Indeed, this situation is even more likely to occur when the coach is experienced and recognized as being successful; circumstances which offer tacit

support to his or her own mental models and thus increase susceptibility to epistemology related dissonance that impact on behaviour.

The alignment of the sporting organization and their coaches relates to the decision making that each coach undertakes when he or she plans sessions, monitors performance, and reflects on past and present action. In earlier work in this context, Grecic and Collins (2013:153) introduced the concept of an Epistemological Chain (EC), that is,

> The interrelated/connected decisions made that are derived from high level personal beliefs about knowledge and learning. [Indeed, they noted that] the EC should be apparent through the planning processes adopted by the coach, the creation of the learning environment, the operational actions taken, and the coach's review and assessment of performance.

Previous research in performance sport had revealed that clear epistemological chaining was evident within coaches of elite athletes (Grecic and Collins, 2012). The EC was confirmed as a manifestation of the coaches' experience and establishment, although elements of it also recognized the external influences impacting upon the coaches' behaviour. Data showed that for each one of the very experienced and high performing coaches interviewed, the EC demonstrated a consistent, logical relationship between philosophy, *modus operandi*, aims, and session content at macro, meso, and micro levels. In short, *intra*-coach EC coherence was found to be extremely strong.

Extending these ideas, and in the present context of the talent pathway, an analysis of *inter*-coach coherence against an externally set EC would seem to be of great interest. High coherence across coaches at different levels and stages of the pathway would be supportive of a consistent message and method for developing players, a characteristic already shown by Martindale *et al.* (2007) to be an important feature of effective TDEs. Building on research supporting the impact of the EC on behaviour, this would engender an even stronger effect if the coaches' ECs showed a close fit with the approaches 'prescribed' by the sport. Therefore the purpose of this investigation was to examine the coherence of the developmental pathway in a British sport's NGB through examination of perceptions and experiences at various levels of the pathway. We were particularly interested in players' experiences of coaching at different stages, and through transitions between the playing performance levels of the talent pathway.

Method

We undertook data collection as part of a larger project evaluating the whole of an NGB's talent pool. Semi-structured qualitative interviews were employed to explore the developmental pathway within the sport, using the EC as an appropriate

framework against which to make comparisons across coaches. Accordingly, a series of interviews were conducted with players, coaches, and the High Performance Director (HPD) collaboratively by the first two authors. These subsamples were used to provide an overview of the perceptions, thoughts, aspirations and preferences of those central to the talent pathway.

Participants

High Performance Director

The sport's HPD was interviewed. The interview lasted 95 min.

Players

Players (N = 12) were sampled from the sport's Under 18 squad (n = 4), A squad (n = 4), and Elite squad (n = 4), this representing a chronological and ability progression along the developmental pathway. Players were nominated by the NGB's coaching department. Each player was interviewed (interview questions available from the authors on request) for an average of 50 minutes. We decided to interview the elite players as well as their coaches in order to provide an insight into the practical operation of the talent pathway. The players were purposefully sampled based on each having experienced two or more stages of the sport's talent pathway design.

Coaches

Coaches (n = 6) involved at the various levels of the pathway were interviewed. Coaches were nominated to participate by the high performance director and represented a purposeful sample of every lead coach and support coach working at the various levels of the sport's pathway. Each interview lasted on average 60 min. The coaches had a mean of 32 years of experience as coaches. Two were coaches to the Elite squad, two coached the A squad, and the final two were coaches of the Under 18 squad. All coaches had previously been professional athletes in their sport. All coaches had also worked with players currently on professional tours and three coaches were still actively involved in coaching professional players. All coaches were male and had previously coached at lower levels of the talent pathway (Regional n = 3, County n = 6).

Procedure

We utilized semi-structured interviews to explore the epistemological focus of the talent pathway. A slightly modified interview was used for coaches and players. To enable ease of access, the players were interviewed separately during the practice days at National Championships at times and locations convenient to them. The coaches were interviewed by telephone at their home clubs. Prior to beginning each interview, participants were provided with a detailed explanation of the nature and purpose of the study and asked to give their consent to participate. Following

introductions and this orientation period, actual interviews lasted from 50 to 95 min and were transcribed verbatim. Each participant was made aware that their responses would be confidential although in the case of the High Performance Director this was waived as confidentiality could clearly not be assured. This confidentiality was protected through the use of a coding system that replaced each name with a group initial (e.g. C for coaches) and number. Any potential identifying information (e.g. names of coaches, players, home club, home town) was also replaced or disguised.

Interview design

We designed a semi-structured interview to collect data on the epistemological focus of the talent pathway. This served to structure the conversation around each participant's perception of key elements of TDEs (Martindale *et al.*, 2007). We were also interested in identifying the processes that may act to prevent the optimal development of the talent pathway. This *sensitizing concept* (Bruner, 1969) provided a starting point on which to base the overall research interest and on which to analyse the data. The main questions to coaches centred on:

- What are the long term goals for your players?
- How do you help your athletes prepare for the next level of their career?
- Describe the links between National, regional and County levels?
- How do key staff work together?'

We used probes and follow up questions to ensure a richness of the data collected (Patton, 2002). Common probes used included:

- Can you give examples when that happened?
- Could you describe that in more detail?
- Why do you think that happens?
- How does that make you feel?

Data analysis

Following a Grounded Theory protocol (Glaser and Strauss, 1967) interviews were recorded and transcribed verbatim and analysed using qualitative inductive methods based on open codes, emerging themes, towards establishing major categories from the data. We arranged these codes into themes based on the converging responses of a number of participants to minimize the effects of personality and other individual differences, thus leading to the identification of common patterns. We finally reached theoretical saturation whereby data from subsequent interviews from each sub sample did not provide any new insights but fitted easily into the developed framework (Glaser and Strauss, 1967).

Specifically for this study, we began the inductive process with open coding of the High Performance Director and then the coaches' interviews to identify *meaning units* (Strauss and Corbin, 1994), where a meaning unit is defined as 'a segment of text that is comprehensive by itself and contains one idea, episode, or piece of information' (Tesch, 1990:116). We listened and read the interviews several times identifying and writing down each meaning unit. We then identified the common features between these meaning units and moved these to a separate document where they were arranged into subcategories and categories. The first two authors listened and read the interviews and independently, developing their own coding scheme and subcategories. The researchers then discussed their findings and collaboratively developed a consensus set of subcategories and categories. We then analysed the subsequent interview data in the same way but this time the emerging themes were constantly compared to the original set of data until saturation was reached (Glaser and Straus, 1967). We then repeated this process with the players' transcripts.

Trustworthiness

We employed several approaches to ensure data trustworthiness (Guba and Lincoln, 2008; Sparkes and Smith, 2009; Yardley, 2008). We triangulated the data from both players and coaches in order to corroborate events and processes from the different stand points and to provide a richer, fuller description of their interactions. As noted above we also adopted a collaborative approach throughout the data analysis stage, with the data coding constantly reviewed by the first two authors and any disagreements discussed and resolved. One way we also achieved this was to constantly discuss the data as a full research team (Morrow, 2005). In addition, as each of the authors is a qualified sports coach with over 20 years' experience, we used self-reflection and self-awareness throughout the data analysis stage to help shape our interpretations and analysis. Our close relationship with the topic helped greatly in our treatment of the data (Denzin and Lincoln, 2008:28) and allowed us to be 'biographically situated' within our study community. We also sought the participants' feedback on the study and engaged in member checking after each interview to ensure accurate representation of the talent pathway's operation. Importantly, and in light of well-publicized criticism on the 'parallel perspective' on validity in qualitative study (Sparkes and Smith, 2009) this procedure was not deployed to support credibility (the parallel of internal validity) but to evaluate the extent to which participants considered our interpretation of their data to be 'accurate, balanced, fair, and respectful' (Sparkes and Smith, 2009:495). In addition we invited all of the participants to a presentation of the study's results at the sport's National centre. Here, we invited the audience to comment and again make changes to their answers if they felt that their intended responses to the interview questions were not accurately reflected. As a final measure we also sought to ensure we

presented disconfirming cases within the results to offer a more complete description of the phenomenon under investigation (Yardley, 2008).

Results: *consistency, clarity, and coherence*

The total number of meaning units identified in the interview transcripts was 878. The coaches provided 299 meaning units and the players 579. Data analysis revealed three main categories relating to the epistemological focus of the NGB on the talent pathway. These were *consistency, clarity, and coherence*. Three main subcategories of *consistency* were identified. These related to the consistency of programme philosophy, culture, and coaching practice. With regards to *clarity*, the four subcategories were clarity of aims, selection, competitive structure, and parental input. In terms of *coherence* the main areas included issues around goals, communication, and the quality of coaching.

Figure 1 details each category and subcategory that emerged from the inductive interview analysis. Following the data representation, more precise details of each category are described. Results illustrate both the coaches' and players' attitudes and are presented against the TDE framework of Martindale *et al.* (2007). Subsequently, longer quotes concentrating on one selected factor are used to ensure the richness of data that fully reflects participants' beliefs about the pathway elements.

Themes	**Sub-themes**
Consistency:	Programme Philosophy Culture Coaching Practice
Clarity:	Aims Selection Competitive Structure Parental Input
Coherence:	Goals Communication Quality of Coaching

Figure 1: *Analysis of themes from coach and player interviews*

Consistency

This topic included the subcategories of programme philosophy, culture, and coaching practice. For this particular illustration, the data selected are targeted at the overarching aims, beliefs, and philosophy that permeate and are reinforced throughout the pathway and reflect Martindale *et al.* (2007) long term aims and

methods, coherent messages and support, and a developmental individualised, holistic focus.

The NGB's stated objective was to create successful National teams whilst also preparing players for a professional career and developing well rounded individuals (as stated in the NGB Strategic Plan, 2011). This focus was clearly articulated by all of the coaches interviewed and played a central role in each of their own coaching philosophies. For example, the HPD stated that success of the programme would be 'when the top 10 players in the world are [from our programme]'. He also noted however his responsibility for the players' 'athletic, educational, and life skills development' and the need for him to support the players' transition to the professional game. Accordingly, his focus of practice was to provide holistic support for the player and to 'fill the gaps' in development in order to 'create an independent learner who could thrive [in the professional game]'. C1 confirmed this philosophy and his aim to support the players. He too reiterated the aim of creating 'autonomous learners' and the need to place responsibility with the players who are then 'accountable for their own actions and decisions'. Education was again mentioned as being significantly important for the players' all round development in order to 'get the best out of the player'. Both the Elite Squad National coaches consciously set difficult challenges and 'speed bumps' (Collins and MacNamara, 2012) to stimulate their learning and develop positive characteristics.

Within the development squads there also appeared to be a consistent message communicated by the coaches. They recognized their role in the pathway of preparing players to make the next step in their development and simultaneously focussing on their long term aim of becoming full internationals and professional athletes. Indeed, C3 stated that the professional arena 'is the next level of the talent pathway' and noted that he was very proud that 11 of the top 100 players in the world had come through the system. C4 described his focus on getting the player 'to be best player they can be'. C3 reinforced the sentiments of the Elite Squad coaches when he described how he provided experiences to help the players become self-reliant and not need a coach; to actually 'make the coach redundant'. C5 even explained how he got this message across to his players by telling them that they 'can't phone a friend' when they are faced with a difficult decision in a major competition.

Again all coaches at this level prioritised athlete learning. C5 stated that his team 'work hard on the learning mode' and in particular their coaching practice 'focuses on the element of learning' and 'developing the skills to make the player as good as he can be'.

The players in turn recognized and described the positive influence that National squad coaches were having on their career. Some players actively supported the philosophy of independence being fostered; however, others were annoyed and confused that greater support was not being offered when they were playing in competitions around the world. In addition, although the players appreciated the need to learn and develop in order to meet their goals, they had all made a conscious decision to end their formal education to pursue a full time career in the sport. Another factor which also impacted upon the consistency with which the NGB's philosophy was perceived and/or translated through the players' experience was in their choice of competition scheduling. This was a wider ranging issue which is specifically identified in the areas of clarity and coherence. In this context, however, it should be noted that the majority of players believed that the National coaches supported their long term goals and, as P1 expressed, the dream of playing professionally. This player had bought into the coaches' philosophies and recognized the need to continually develop: 'I need to develop skills, winning [competitions] is a by product of developing skills. I'm learning to develop skills. I don't think you ever stop learning'.

P3 applauded the individualized element of the programme: 'I think it is good that they have recognized we are not robots. Obviously they're trying to get me to work on… but it is good that they see us as individuals'.

There were, however, some concerning comments that contradicted the overall players' perceptions. Some noted the conflicting demands being placed upon them in order to achieve or maintain international honours. P1 noted that he was continually playing competitively in order to gain amateur world ranking points but that he was actually playing more than if he was a professional. He described the negative impacts of pressure and fatigue on his personal development. P5 even recounted a situation where his squad was put under unmerited pressure: 'We were told that if one of three of us didn't win, the coach would get the sack. I couldn't give a **** . . . I'm not here to save anyone's job'.

Indeed, P7 thought his country was sometimes too short term focussed: 'The National coaches have the short term goal to win for [our country] whereas my own [personal] coach is more focussed on the long term goal'.

In further contrast to the generally consistent messages above, both players and coaches described a very different interaction with coaches and managers from the lower levels of the pathway such as the regions, Counties, and their local club coaches. Coaches described situations where Counties and clubs attempted to stop their players progressing through the pathway in order to keep the player to themselves and for the reflected success that this would bring at this level. Indeed

the HPD even noted that he had 'very little influence over the pathway [lower down]. The clubs are very independent; the programme is run by the Counties independently. We have a little more influence at the regional level… but the club coaches won't let go'.

Clarity

This main theme included the subcategories of aims, selection, competitive structure, and parental input. For the purposes of this study however, we focused on the main areas of selection and competition programing, focusing in particular on the clarity of selection, deselecting, and reselection policies. Again this is referenced against Martindale *et al*. (2007) focus of coherent messages across the talent pathway.

At the highest level of the pathway the NGB's selection policy is:

> To establish a clear, transparent, and accountable system of selection for National teams and squads that is understood by players and is as objective as possible . . . [This] is based around the opinions of the selectors to choose players who will win for [the country], players who will represent [the country] with distinction; and players who will gain experience from playing in the events (excerpt from the NGB Strategic Plan, 2011).

The National coaches however seemed less assured of the selection position. Indeed, they highlighted that they were not part of the selection process and noted a focus of age group success rather than a longer term developmental ethos. Despite not being responsible for the initial selections, the coaches did articulate their focus on clearly communicating what was needed to remain in the squad, sending clear messages of expectations and offering guidelines for behaviour. C1 noted the change in philosophy during his time working with the Elite Squad: 'No longer [is selection based on] once in the squad always in squad; selection now depends on performance . . . [and] open competition but good competition for places'.

C2 noted however that there are still:

> …A few favourites in the system and that we need to find someone who is hungry. We tell players that none are guaranteed in the next camp but some players expect to be in the [National] squad even if they don't do it.

C1 stated how this led to his frustration, stating when a player is used to being in the squad:

> …They become top dog and just do enough to get by; we call it squad coma. They've been in too long [and] if they don't work we drop them. We provide the evidence; this is what they are not doing and we drop them.

Across the pathway levels, coaches believed that they adhered to clear guidelines for selection and deselecting at the different levels and provided positive links up and down the pathway. However none of the coaches commented on what the players needed to do about being reselected once dropped from a squad. Indeed the coaches also noted that some players skipped levels at the decision of the selectors rather than on their own professional input.

As within the Elite squad, the coaches at the level directly below tried to proactively manage the process and create an open and supportive culture. C5 described the situation where, despite the A squad being preselected, he tried to foster a culture where players earn the right to attend the next session based on their previous performance. He did report trying to explain individually why they had been selected for the assessment session and focussed on longer term factors such as 'assessing whether they are coachable'. Meanwhile C4 described a situation in the U18 squad where players were simply selected by their [ranking] and sent into the squad by their Counties in the hope they would develop as better all-round players. It was left to the coaches to mould the players and develop a performance culture.

Player perceptions also did not seem to tally very well with the sport's description of the clear message being transmitted about selection practice. The elite players accepted that they had to perform (pressure is also being exerted on players further down the chain with little focus on their longer term development), but seemed confused by the need to 'develop' at the same time as 'performing', such as when in the process of undergoing a technical change. Examples of the messages being received included P2 who noted that 'if we don't play well we won't get picked, won't get on the X squad. It is pressure, but that is what the [professional] players are under'.

With regard to the selection policy, P3 stated that:

> …It hasn't been explained to me but at the same time I think it is pretty obvious. If you have top 5 finishes you know you will get in the National squad. It isn't set in stone but I don't think it should be.

P6 however was a little less clear on the message he was receiving when he recounted:

> …I really don't know what the [NGB] are thinking, or how they decide on selection. But you get two years in the squad and then that is it. If you haven't progressed then that is too bad. If you haven't made progress in two years then it is time for someone else . . . . If you don't make the progress in two years then you don't deserve it.

Indeed P9 illustrated a complete lack of receiving any message at all:

> …I guess if you're not playing well you wouldn't go on any trips. My friend got dropped and left, turned professional straight away. Others got dropped for a year but then came back in. I don't know why.

By contrast, P11, a member of the same squad, painted a very different picture of the selection ethos and described the supportive nature of the selection policy:

> …When you have a bad run or a bad game it's not like they're gunning you down. You know you won't get dropped from this squad. You won't be selected for the best events but you'll still be in the squad.

Clearly the players were either hearing or understanding things completely differently. At lower levels of the pathway, interviewees described an environment where Counties and coaches viewed the National set up with suspicion. They explained the view that the National squads were seen as stealing players and had little appreciation of the Counties' introduction role and their place in the talent pathway.

Coherence

Here the subcategories of goals, communication, and the quality of coaching were established. For the purposes of contextualizing the results, the focus here is on Martindale *et al.* (2007) aspects of holistic, integrated development with regards to the coaching methods engaged and how the individual planning process is undertaken and communicated.

The HPD referred back to his initial philosophy of creating independent learners. He described his focus on filling the gaps and of creating individual development plans around the players' needs. A large driver of these plans was to provide the opportunities for players to make mistakes and learn from those mistakes, in short, to provide speed bumps for the players. All the time, his planning was based around targets referencing the players' competencies against professional athletes in order for them to appreciate where they were against their long term goals. C2 agreed that planning and delivery was based on this individual needs analysis. He saw his role as providing tasks so the players could 'fill the boxes'. C1 noted that he focused most of his methods on developing professional level skills, allowing player self assessments, and therefore creating the opportunity to coach using competitive practice and tournament preparation. He explained that:

> …The Elite squad provide challenges such as booking hotels, flights, developing life skills. Their methods are performance based, individual programmes to be challenged to see if it breaks down. Skills testing to highlight weaknesses. Opening the opportunity to coach and opportunities for players to learn . . . We don't make him do it but provide the reasons why we think he should do it.

Across the levels, the methods used by coaches and the planning undertaken seemed to link again to the developmental, individual, holistic philosophy and a shared epistemology based on locating learning within the player. C3 explained that in his squad they recognized the need to get players to have an open mind to get to the next level. As with the higher levels, training revolved around competitive coaching and providing the skills to become a professional athlete. C4 explained:

> …Every part of the training is specific to the player, all different abilities, they have an individual plan to go away with, a players' website and feedback sheets. We challenge players with foreign tournaments. We provide experiences to help players become self-reliant. Make players not need the coach, make them redundant. We measure our success by if the player is self-reliant, a world class player.

C5 explained his emphasis of 'competitive coaching focussed on the element of learning. It's not a case that you have to be able to do this but it is about learning. It is their responsibility to get themselves organized'.

At one level, the players appreciated and understood the focus of their coaches, the individualized nature of support, and the methods used. For example, P1 explained:

> …They offer a very personal service; spend time with you, not rushing to see someone else. They set up challenges, you stand back sometimes and realize what you are learning. They sit down each night and ask us how we liked it. This is a players' squad, we decide what to do within reason. We're almost like a player run squad. They talk to us about what we want to do which is great, really great.

P3 agreed with this player led planning and delivery ethos:

> …They will do whatever; if you want to go technical they will go technical. They will tell me things that they think will help me but if I don't want it they are fine with that; I will just choose what I want. They can't hold your hand. They can only do so much. You have to do 90% of the work. I've become more independent. I've grown up a lot. I've changed and the coaches have helped me to change.

However other players from the lower levels of the pathway suggested their coaches' input into individual planning offered many contradictions which led to conflict and confusion. Notably, this strikes against the talent environment and epistemological basis described above. For example, P10 thought that the coaches' methods were not actually catering for his personal developmental needs at all:

> …It should be if you want a [coaching session] fine, but you should have free time to work on what you want. Sometimes you get too much information which is confusing. If one coach is telling you one thing and your own coach is telling you something else it's difficult.

The players' experience of planning their year and future programmes also seemed to be misaligned with the support and long term focus of the NGB. At one level, players recognized the conflict of planning to play too many competitions and the potential damage this would have on their game development:

> …[My plan is] a bit manic, too much really. But as I want to get into the [Great Britain team] I need to play in everything. I know if I play for two or three weeks and then have a week off it would be better but as I'm not in the team yet and I want to beat all the others I need to play all the time. It is not ideal but it is the only way (P3).

Some players even described situations where they were annoyed by the lack of support, especially after putting time and effort into the planning process themselves:

> …We did have to do a player development plan. At that time I thought that's good but afterwards I've heard nothing and not seen it again. I don't know if they've read it or not. I've had no feedback at all (P3).

P1 agreed that he also needed more help: 'No one has asked me what do I need to do to get where I want to be? It would be good if someone would talk about tournaments and life'.

The issue of communication was resonated in players' comments relating to the support they felt they received. P5 expressed a common sentiment when he said he would like the coaches to phone him and ask how he was doing. The players also brought up the lack of communication between the National coaches and their home coaches, about how they were performing against their targets. P4 described the relationship between his two coaches: 'They don't really contact each other. I'm really the middle man. I tell them what I am working on and I tell [my coach] what they have said'.

P5 however was a little more damning in his assessment of communication: 'As soon as the season is finished you don't hear from them. Over. Gone. They see you in winter for three or four days, the rest of the time they must be working on other things'. There did however seem to be a large discrepancy in how the players perceived this element of the pathway with P11 describing a very different working relationship: 'They contact me just to see how I am. Having that person taking an interest in you is really good. Being able to text someone who will help is a good feeling'.

Lower down the pathway, the NGB's message of its developmental focus and individualized nature of coaching and planning seemed further at odds with the practices undertaken. For example, players recounted how inter County matches at various age groups were often driven by a 'win-at-all costs' mentality. Indeed, the

National coaches believed that the development ethos of the sport did not necessarily permeate down the age groups at every County. They described a situation where the clubs suspected the Counties and the Counties suspected the National team of poaching their players.

In fact, the players recognized this difference in coaching philosophy and methods employed and described the harmful effect it had had on their development noting that there is nothing worse that when two coaches disagree. P7 supported this experience: 'I used to go to County coaching; one coach told me one thing, then I'd go back to my coach who'd tell me to ignore it. That conflict was a recipe for disaster'. P12 highlighted the different ethos remembering his experience at the lower levels: 'You just messed around. [Now] it's totally different, much more nailed on. We've changed coaches, we're with better players, working together to get to [the] same place'.

Discussion

This study aimed to explore the existence, application, and coherence of the EC construct in an organizational decision making process. We would have expected data analysis to demonstrate the clear existence, usage, and alignment between the five stages of the NGB's talent pathway under review. Indeed, TDE theory proposes a framework of best practice with an epistemology based upon the holistic development of independent learners with knowledge created and shared between player and coach. Research in high performance environments has highlighted the importance of shared goals, values, and beliefs across organizational levels for success (Cruickshank and Collins, 2012; Cunningham, 2009; Fletcher and Arnold, 2011; Martin and Carron, 2012). In this study environment therefore, we expected to have found an aligned talent pathway with a common focus and messages clearly communicated from coaches to players and back again, both vertically and horizontally across the talent pathway as illustrated in Figure 2.

Notably, however, the data highlighted how such a shared epistemological stance was not necessarily recognized and communicated at each level of the sport's talent pathway. The data presented illustrated discrepancies in the epistemological beliefs between coaches in the different squads, for example the messages they sent to the players and how these messages were being received and perceived by the players. That is to say there were major issues around the 3 C's of consistency, clarity, and coherence. Figure 3 demonstrates this suboptimum talent pathway, with 'static interference' blurring the communication of the key messages within talent development.

In particular, the study uncovered a lack of consistency of epistemology within the sport's pathway. At the higher levels, coaches placed the responsibility for

learning with the player, fostered independence, and created autonomous decision makers. In contrast, lower down the pathway coaches fostered reliance in players and did not allow them to undertake the developmental challenges they required. In respect of clarity, the issues raised by selection and the dichotomy of demands to perform and/or develop placed on the players seemed at odds with the developmental, learning epistemology espoused by the NGB. Finally and with regard to the pathway's coherence, the methods adopted by coaches seemed to support an epistemological stance and focus on the players' long term aim of being a professional athlete. This message seemed to have been lost in translation as it moved down the pathway.

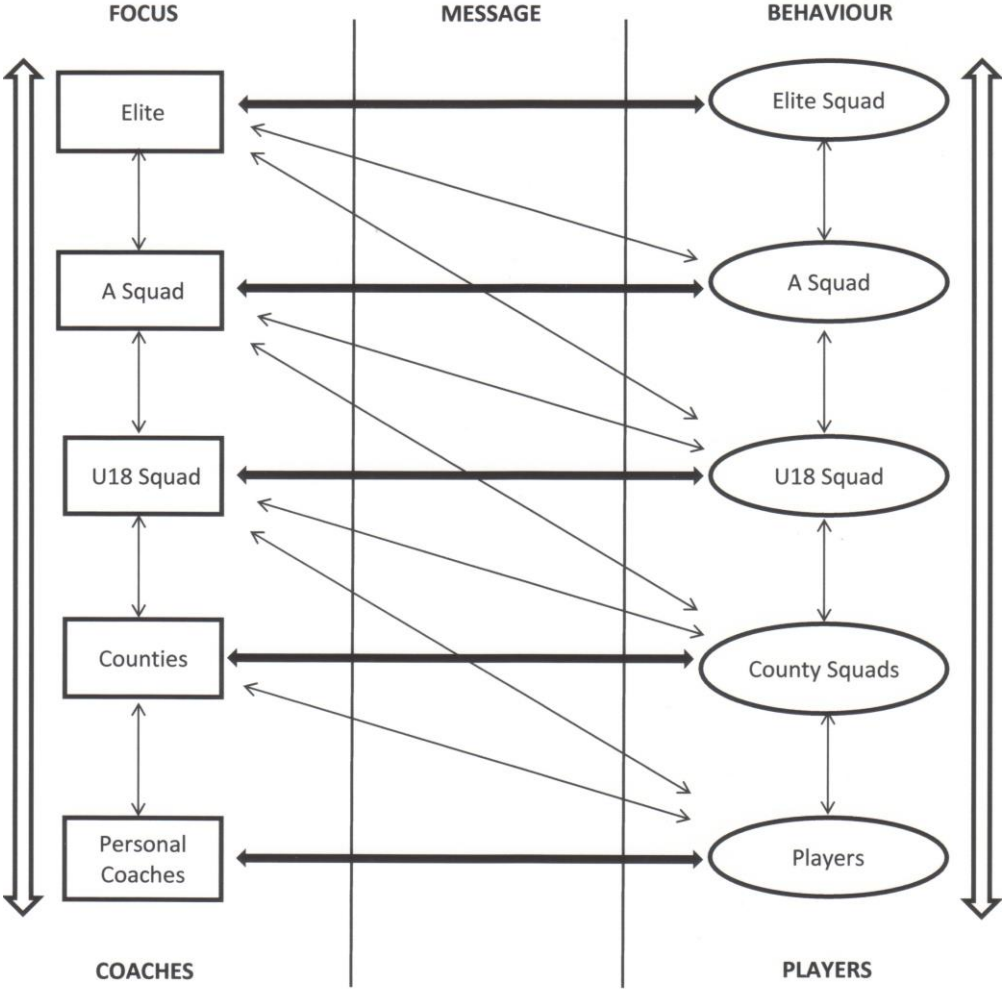

Figure 2. *Communications in a 'perfect' talent pathway*

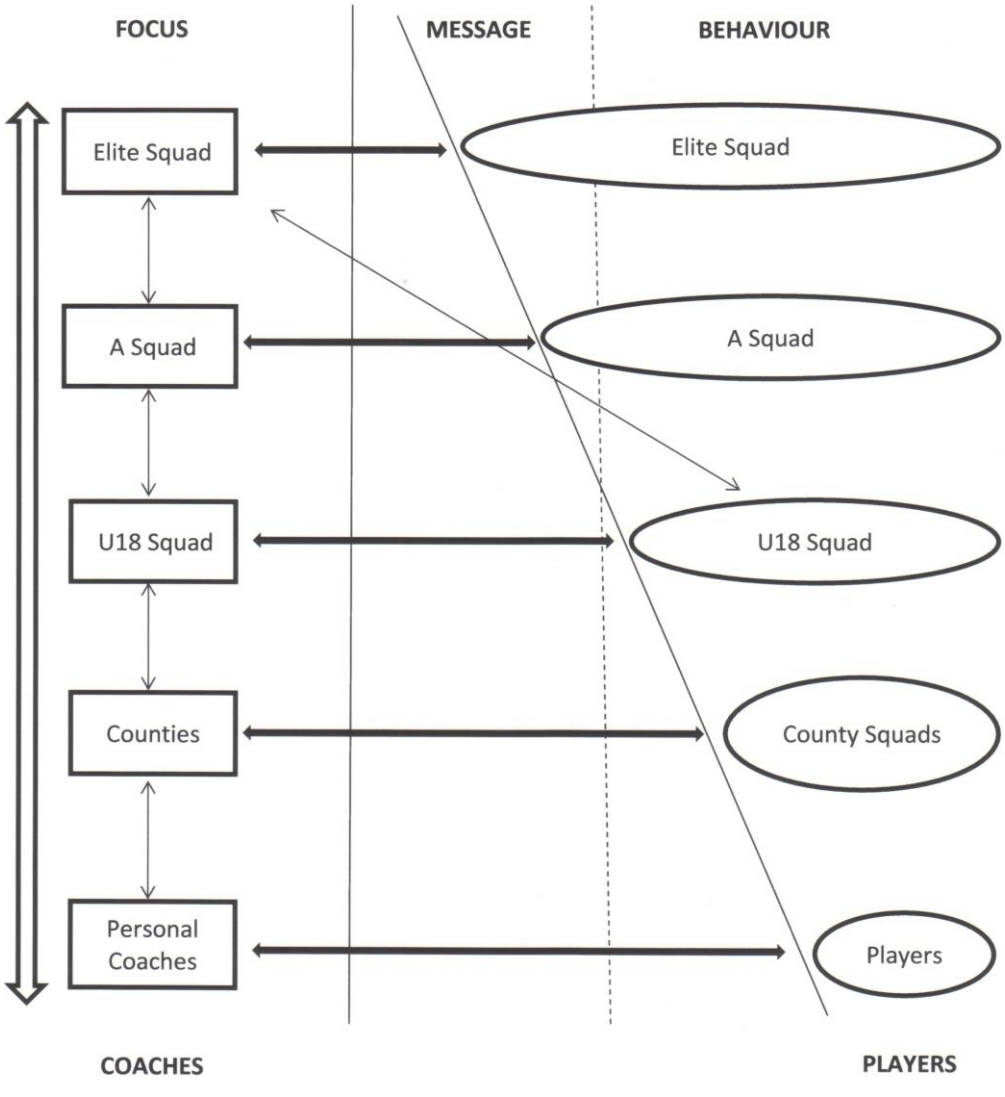

Figure 3. *Communications in the NGB's talent pathway*

What are the reasons for the discrepancies?

Perhaps it is not unreasonable for the results to show the different methodologies practiced within the pathway. The Elite squad, by its nature, needs to be more performance orientated with the lower levels having more of a developmental focus. Mixed messages seem to have been sent and received, with players lower in the pathway recounting the performance rationale and of being put under pressure to gain immediate results; in short, the opposite effect. The lack of clarity evident within the selection, deselecting, and reselection of players is symptomatic of this lack of clear communication to and from the players. This process seems further

compounded by the system in operation, with neither players nor coaches happy that selection decisions are taken by those at a distance from the actual practice. Indeed, the selection practices seem at odds with the epistemology of the players' long term development. For example, 'you get 2 years and then you're out' (P5).

With regard to the pathway's coherence, although each squad shares the long term goal of its players making it into the professional arena, many of the methods, practices, and structures engaged by each level of the pathway are very different. Competitive practice, self-testing, and reviews that are player led and individualized with a culture of ownership and learning being fostered are at odds when compared with structured, regimented, coach-led practices with coaches simply transmitting knowledge delivered at the other levels (A squad and lower). Where coherence does exist between the Elite squad and U18 squad, this is merely a serendipitous occurrence rather than a consciously managed process. For example, where the same coaches deliver on both programmes or where a coach is working privately with a player from another level of the pathway.

How can it be remedied?

At the highest level of sports organizations, stronger leadership and vision is required to reiterate and redefine performance culture in terms of learning. This message then needs to be communicated clearly to all involved so that there is a high level of coherence in both the coaches and players' perceptions of the management's aims, action, and its efficacy (Cruickshank and Collins, 2012). In the context of National squad coaching sessions, this will enable coaches and players to distinguish between sessions that are either performance or development orientated and understand the rationale behind them. In this way, mixed messages will no longer be sent and received such as when P7 described his current experience:

> …I was thrown into performance camps straight away [where] if you don't perform you don't get picked. There was a camp where I was working on something but then I had to go straight into a skills test for selection.

An NGB board and its HPD are crucial in setting the vision and culture of the programme (Cruickshank and Collins, 2012; Fletcher and Arnold, 2011). In turn, this needs to be agreed and clearly articulated to all members of the pathway. Key messengers need to be identified at each level and brought into the decision making process. Here the more voices reinforcing the message at each level will help reduce the static and ensure that stakeholders feel valued and involved in working towards the vision.

In order to facilitate this consistency of message, the epistemology of each squad's lead coaches and their support teams must also be aligned. Here the EC should be used as a useful framework against which the selections could be based

(see Grecic and Collins, 2013). Indeed, this framework should also be used as a development tool for the training of coaches and players in order to explore and strengthen the shared vision, values, and beliefs of the entire talent pathway. With such a regime, the pathway could establish greater integration of coaches and players at all levels, establishing communities of practice with guests i.e. players and coaches invited much earlier in the pathway so that the NGB's long term developmental epistemology can be gently infused during their most formative stages. Another positive outcome would be the creation of a team specific cultural identity. This will result in more integration of players between the levels and a greater focus on the long term aim will be established. Key to this outcome however, is that clear guidelines on selection, deselecting and reselection policy are provided and that the support systems are communicated to all involved. Indeed, which indicators are considered in this process, how, and by whom are crucial tenets of the talent selection element of the pathway. The current situation, with the coaches sitting outside the decision making forum is confusing to players and coaches alike; as explained by P3:

> …My biggest query in selection is that the coaches are not involved in selection. X goes to the tournaments, travels away with us, sees the players, coaches the players, knows how we're doing, how we're thinking. He coaches professional players and knows what is needed. He should be Chairman of Selectors.

Although this promotion may be a step too far, without first undergoing a rigorous selection and training process utilizing the epistemological chain framework, this final quote once again effectively demonstrates the crux of the issues within this study, namely the perceived lack of effective communication between the social actors of this sport's talent pathway. This work continues to tease out the different management and influencing strategies through which pathway coherence may best be optimized.

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Epilogue

Reflection: A new direction in waiting…..

As described in the Preface, this study has demonstrated the outcome of how the EC can be implemented at a macro level within sports organisations to assess and support the development and management of a talent pathway. Reflecting on the value of the EC construct I am incredibly pleased with its utility and how easy it was to implement for this particular study. I also feel the results it has provided - particularly the 3 Cs model that it has highlighted, can be utilised by other organisations to help guide and shape their own systems and structure.

The title of this investigation *Back to Front Coach Learning* refers to the end of my exploration into this phase of the EC of sports coaching, and the process which has really taken me full circle to consider the start of my coach learning journey. I do intend to explore the associated areas of values and beliefs, philosophy and practice in more detail, as well as how such constructs are articulated in other fields such as within Physical Education and Sport Science and motor learning in particular but I now have a change of focus which would have been unthinkable as a practicing NGB coach and ex-PE teacher at the outset of my PhD research.

This change of focus reflects my realisation and renewed awareness of the humanistic and sensory areas available for exploration. Reflecting I hope, my EC's evolution and my more sophisticated approach, I now wish to explore and investigate new areas of understanding and meaning making and create new knowledge which I can share with colleagues, students and the wider sporting community. In parallel to this change of focus is how I intend to present future findings. My journey does not just refer to the creation, testing and subsequent iterations of the EC. It refers to my evolution of thinking in terms of research methodology. Over my past studies I have experimented with more creative, artistic, and fictional representations of data. It is in these areas that I hope to develop my awareness and confidence so that if I were to ever to undertake such a study as the one above I would have the conviction to avoid positivist and reductionist techniques and present a fuller, more vivid representation of an organisation utilising caricatures, images, fictional prose and mediums which stimulate the senses.

Advice to self – next time…

A common phrase in academia and coaching is that we and others 'don't know what we don't know'. Looking back on my research journey I have been reflecting on what advice I would now give to the *me* of 8 years ago. As a coach and teacher I had always been interested in the area of philosophy and beliefs and how they impacted coaching and teaching behaviours, so the guidance I would have given myself should have been about the importance of really knowing and understanding my personal values when it comes to knowledge and learning. I should have said to 'take more time to really appreciate the value of research philosophy and methodology', rather than just skirting over it because it needed to be put in a research application and thesis to be examined. I should then have urged myself to 'seek out kindred spirits' who could nurture this desire. With a greater awareness this would have brought no doubt, I would have been more confident to experiment and innovate much earlier in my journey and this I am sure I would have encouraged and assisted a pragmatic research philosophy and my desire to 'make a difference'!!!!

JQRSS Author Profile

David Grecic is a Principal Lecturer at UCLan. His has just completed a PhD (2014) which focussed on how theories of teaching and learning impact decision making and professional practice in the world of elite golf. David hopes to extend this line of investigation into the wider domain of sports coaching and the teaching of Physical Education. In this way he aspires to provide support and guidance for developing coaches and teachers wishing to develop their pedagogy, planning, critical reflection and decision making skills.

Reviewer comments:

The unusual structure of this article indicates that it is a critique of evolving research practice as much as it is about sports coaching and knowledge hierarchies. Sandwiched between the personal Prologue and reflective Epilogue is a clinically efficient Grounded Theory investigation. Thus, an overview suggests that if the author knew then what he knows now, he might have done things differently. Towards a discussion of coach education, two issues resonated strongly with me. First, that there are considerable challenges for NGBs to deliver a clear and coherent talent pathway whilst simultaneously acknowledging the impact that coaches' deep held, personal philosophies can have upon the players' experience. Secondly, I found interesting the perennial difficulties for coaches at lower levels of the talent pathway; clubs and regions, to let players progress to higher performance cultures… 'but the club coaches won't let go' one coach explained. If there is trading in the currency of talent, should there be some payment or recognition for gain, or compensation for loss, through the upward migration of talent? This poses a gritty dilemma for the upper echelons of the coaching world, i.e. how to sustain the lower ranks that feed it. Further investigation through novel data may reveal new insight.