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Into the Abyss: a study to inform and develop a bespoke athlete transition model for professional rugby. Part 1: establishing a theoretical framework to guide the investigation

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Keywords: talent development, performance, culture, academy

Abstract

A real-world challenge was identified by the first author in how to create a bespoke athlete transition model for his professional rugby club. To guide the study a theoretical framework was sought to direct the data collection and analysis stages of the investigation. Established Talent Development (TD) research from other sports and TD environments is presented along with the authors' reflections on the literature to demonstrate the iterative process of developing their own theoretical framework. The intention was to shine a light on this research process so that both students and novice researchers could better understand the considerations that underpin this process within such a study. The product of this process is presented, that is, the C.A.R.E. Transition Model, which embeds and reflects the various best practice TD influences explored and assimilated by the authors. This model will now form the basis of future research into this phenomenon.

Introduction

Within professional sport many clubs and organisations operate or bear influence upon a developmental pathway which includes primary, secondary and tertiary school age bands. The success of this pathway is commonly assessed by the progression (numbers / quality) of child athletes through these stages with the desired final destination being a professional adult contract with the club. Of particular interest for most clubs is the final amateur stage of the pathway (16-18 years old) commonly referred to as the Academy stage in the UK.

This paper is the first part of a study that takes place at a professional rugby club in the North of England, UK. The club had previously reshaped its development pathway from the ages of U13-18 years old (secondary and tertiary school ages in the UK) and now sought to determine the most aligned and effective rugby transition



model to maximise the numbers of Academy players progressing into the first team squad. The study sought to dig deeper into the lived experiences of those involved in order to gain insight into the challenges and opportunities that present themselves to both athletes and professionals operating in this domain. The first stage of this research process however is the development of a theoretical framework that reflects the underpinning academic literature and evidenced based best practice to shape the research question, data collection and analysis. For many students and novice researchers this stage of the research journey can be confusing. Often an existing model or theory is searched for then when found it is simply adopted and dropped on top of the topic area in order to fulfil the research study criteria. However, the thought process that underpins the development of a bespoke framework that shapes what and why data are collected is rarely exposed. Here we present a range of academic studies from the area of Talent Development (TD) and explain the iterative process of building our framework so that others may gain a greater understanding to our study's rationale and the thinking behind it.

The talent discussion

Talent, giftedness and expert level performance have been of longstanding interest to researchers and practitioners alike. Debates have revolved around how such talent is created, identified, best supported and maximised to enable the person to fulfil their potential. Originally a nature versus nurture debate ensued until Howe and colleagues made the significant TD assumption that innate talents are not automatically transformed into elite performance (Howe, Davidson, and Sloboda, 1998). Instead athletes are required to acquire key attributes through training and practice to perform optimally in their sports (Tranckle, 2004). Considering this new direction many authors suggested that athletes require conducive learning environments to realize their potential and achieve expert levels of performance (Abbott and Collins, 2004; Durand-Bush and Salmela, 2002; Williams and Reilly, 2000). It is therefore significant for us to understand the TD environment (TDE) in which athletes are situated. As Vaeyens et al, (2008) state clearly, 'Talent Development' offers optimal development and training opportunities by providing the most appropriate learning environment, to achieve the maximum level of performance in a particular sport (Vaeyens et al., 2008).

Taking the premise that talent can be developed, many academics have proposed frameworks and models of how this can be best achieved as well as the different stages and environmental influences athletes are exposed to throughout their journey. These models have traditionally been based on a staged and linear process (Bloom, 1985; Coté, 1999, Balyi and Hamilton, 2004) and later developed into multidimensional models with various factors bearing influence at different times and loci within an athlete's career (Bailey and Morley, 2006; Gagné, 2004).

Although TD models present interesting guidance to those working in the High-Performance (HP) area, recent studies have highlighted that the environment itself, as much as what is implemented, has a profound bearing on the development of performers (Martindale, Collins, and Daubney, 2005; Henriksen, 2010; Phillips, Davids, Renshaw and Portus, 2010). We now present a more detailed summary of the work above and our reflections and thought processes that have underpinned the development of our own bespoke theoretical framework.

Staged and linear models

The foundation for many of the current talent development models came from Bloom's three stage model (Bloom, 1985). The three stages 'Early years', 'Middle years' and 'Later years' were later adopted by other authors (Régnier, Salmela and Russell, 1993; Coté, 1999; Van Rossum, 2009) as the 'initiation phase', 'development phase' and 'perfection phase'. Ericsson, Krampe and Tesch-Romer (1993) proposed a theoretical framework to suggest that expert performance is the result of extensive engagement in purposeful activity to improve performance i.e. deliberate practice. Côté (1999) developed this work but made an important distinction between 'deliberate play' and 'deliberate practice'. His Developmental Model of Sport Participation (DMSP) contained three stages of the sampling years, the specialising years and the investment years, with the emphasis on fun and experience in different sports during the 'sampling years' (Côté, 1999).

Extending this staged concept of development Balyi and Hamilton (2004) proposed their Long-Term Athletic Development model (LTAD). This proposed, from a physiological perspective, that sustained success comes from training and performing well over the long-term rather than winning in the short-term (Balyi and Hamilton, 2004) with athletes passing through 7 stages of development from initiation of Active Start through the Training to Win stage at the peak of their sporting careers and finally to remain healthy post career in the Active for Life stage. This model suggested windows of development based on the athletes chronological age which would then allow progression into the higher stage. Here each stage is providing the building blocks for progression to be achieved in linear fashion based primarily on the physiological development of the athlete.

Summary thoughts: In this section a significant TD theoretical distance is travelled. Beginning with a straightforward linear concept, then we are challenged to consider 'stage' of development over 'age', and finally move to promote a model which shows 'how' best to develop talent. Although the staged and linear models have various criticisms and may not stand up alone to rigorous investigation into the effective transition into professional rugby, there are elements from each that currently withstand the test of time as the long-term development of an athlete is still forefront in TD programs (indeed the International Rugby Board still promotes the LTAD model on its website), as well as the balance between purposeful repetitive practice and learning

through the constraints of games and 'deliberate play'. Does our framework need to reflect this LTAD focus in more detail as most players and coaches will be familiar and have been exposed to this over their careers? Is the physical development of youth here the key point? (based on stages, windows of opportunity, focus on strength, speed, endurance, agility, mobility, power, fundamental movement skills and specialist sport skills).

Multidimensional models

Many authors have recognised the one-dimensional nature of the linear models above and have proposed alternatives to enable consideration of additional variables. In Gagné's (2004) 'Differentiated Model of Giftedness and Talent' (DMGT) he made a clear distinction between giftedness and talent. Here he described how natural abilities can become systematically developed skills influenced by several factors. Talent can thus be developed by transforming gifts, 'raw material', into talent, 'ultimate achievement', through a process of learning, practice and training influenced by various intrapersonal and environmental factor 'catalysts', and chance. Intrapersonal catalysts include physical characteristics, motivation, volition, self-management and personality. Environmental catalysts include friends and peers, social class, economical and geographical factors and the way in which the environment is structured to facilitate training improvement.

Bailey and Morley's Model of Talent Development (2006), they distinguished between the expression of abilities and the progressive emergence of these abilities into certain formalised outcomes. They explained that these abilities are developed within certain domains and can then be refined, combined and elaborated into particular behaviours, such as sporting success. These abilities are physical ability; inter-personal ability; intra-personal ability; cognitive ability and creative ability. They went on to say that, underlying this multidimensional framework is a claim that success in sport needs to be understood in terms of the emergence of a wide range of abilities rather than simply physical prowess, which has tended to dominate talent development practices.

A very important shift in focus in this section is the recognition of the significance of the wide range of abilities required in TD (inter-personal ability; intra-personal ability; cognitive ability and creative ability) and not just physical ability alone. These need to be reflected in our theoretical framework and any model that we build. An understanding emerges here that given the right training and learning opportunities raw material can be developed with an emphasis on the environmental factors. An understanding of how to develop the wide range of abilities required should be a consideration of our framework.

Holistic and ecological models

From the perspective of developmental psychology expert acquisition is the process of interaction between the learner and the environmental factors (Barab and

Plucker, 2002; Bronfenbrenner, 1999, 2005). Parallel to this, sporting expertise is acquired through successful adaptation of numerous environmental constraints or factors as well as experiences in training and competition (Davids and Baker, 2007; Phillips, Davids, Renshaw and Portus, 2010). It is therefore suggested that rather than merely focusing on intrapersonal Talent Development Environment factors, such as athletes' physical traits, the TDE factors should be identified and enhanced to more effectively develop talented athletes (Bailey *et al.*, 2011).

Reflecting many of the models and ideas above a clearer holistic approach has been promoted for successful TD with a recognition of all those involved in the process either directly (athletes, coaches, sport science support) or indirectly (family, peers, teachers etc). Martindale *et al.* (2005) noted the importance of 'all aspects of the coaching situation' (Martindale, Collins, and Daubney, 2005:354). Their model expressed the holistic and long-term nature of the TD process highlighting the important roles of all stakeholders. Henriksen (2010) meanwhile presented a description of the most conducive TDEs in Scandinavian sports outlining their dynamic system which comprised of: (a) an athlete's immediate surroundings at the micro-level where athletic and personal development take place, (b) the interrelations between these surroundings, (c) at the macro-level, the larger context in which these surroundings are embedded, and (d) the organizational culture of the sports club or team, which is an integral factor of the athletic talent development environment's effectiveness in helping young talented athletes to develop into senior elite athletes.

Summary: This section highlights the dynamic interconnections and interplay between the organisational culture and the TDE at a macro level, the micro level, and the holistic development of the individual. Understanding the individual, the TDE and the organisational culture will no doubt be influential in developing a transition process into professional rugby. These elements must be easily identified within our framework of investigation and may need to be explored further in order to reflect the context of our research more fully.

Time to reflect on what we have and what we need - maximising potential in talented athletes

The research we have reviewed so far seems to align well with the second author's own work on athlete development which groups the influencers as Cognitive, Athletic, Relational and Emotional factors (Grecic, 2017). Although the terms are slightly different this may be a scaffold we could consider the information against. Although a very strong focus on the environmental considerations of TD is emerging, the specific role of many High-Performance (HP) sports professionals is to ensure their athletes fulfil their potential and reach the highest level that their talents deserve. For many this will be a personal best time, distance, performance or victory. For those in the sport of rugby this will first be for them to secure a

professional playing contract. This transition therefore from junior amateur to adult professional status is the key milestone in the TD journey. Various elements have been considered that may impact upon such an athlete's transition and a number of specific studies from this domain must therefore influence the further development of our theoretical framework.

Specific td transition studies to inform our framework

It must be noted here that at the time of writing no existing guidance is provided by the national governing bodies (NGB's) RFU and World Rugby (https://www.world.rugby/) for the transition from amateur to professional in the sport. For context the following studies are presented from rugby and other sports to illustrate the challenges that athletes and professionals operating in this domain encounter. These ideas and concepts will further inform our model and provide direction for our future research

In the research paper *On the Transition into Elite Rugby League: Perceptions of Players and Coaching Staff* (Jones, Mahoney and Gucciardi, 2014), the study aimed to generate new insights into within-career athletic progressions by exploring players' and coaching staff's perspectives on the transition from sub-elite to elite level rugby league within an Australian context. 17 male rugby league players who had been or were part of an elite rugby league squad, and 9 staff who had experience working with transitioning rugby league athletes were interviewed. Three global theme that underpinned successful transition were identified i.e.. Personal physical and psychological attributes, environmental factors, and critical incidents. Findings also provided support for the robustness of a holistic, lifespan developmental perspective of career transitions for rugby.

Although there are obvious comparisons between rugby league and rugby union, it is essentially a different sport and as such undoubtably presents very different demands on the player both physically and cognitively. Physically the functions and roles that players have to carry out in game play are vastly different and the game of rugby union is far more complex in terms of the laws and the decision-making dynamics of the game. Therefore, the preparation and training for each sport are significantly different but we must not discount the importance of the physical and cognitive attributes of athletes and how these affect the athlete experience in the transition phase of TD.

A study in rugby union and possibly the most pertinent research article uncovered was - *Shoulda*, *Coulda*, *Didnae* - *Why Don't High-Potential Players Make it?* (Taylor and Collins, 2019).

The purpose of this study was to explore the reasons why performers of high potential didn't meet their expected performance level. Participants, who were experienced talent developers in high level academies from football and rugby union,

identified five broad reasons for these failures: namely, the lacking of physical skills, lacking of mental skills, serendipity, pathway-based failures, and maladaptive family input. Supporting the previous work of Holt and Mitchell (2006) this investigation of the talent graveyard suggests that the most common reason for failure to successfully transition into professional sport amongst a group of 60 high potential athletes was their individual lack of sufficient psychological resources despite them possessing many other prerequisites of attaining elite performance,

The results build upon previous work that focuses on the centrality of a constellation of mental skills in facilitating a performer's journey and across transitional stages of development (Wylleman and Lavallee, 2004; Van Yperen, 2009; MacNamara *et al.*, 2010; Larsen, Alfermann and Christensen, 2012). Previous work that we are aware of has also established that elite level performers demonstrate high levels of psychological resources and successful athletes will demonstrate a constellation of appropriate mental skills on their way to the top (Orlick and Partington, 1988; Gould, Diffenbach and Moffett, 2002; Collins *et al.*, 2016).

Summary: Although lessons can be learned from this study regarding the transition into professional rugby union, the study is retrospective in its design and clearly identifies the lack of psychological skills as the significant factor for failure in transition. We are now convinced that some of these mental skills supported by Baker and Young (2014), and MacNamara, Button and Collins (2010) will play a pivotal role in transition and they may need to be prioritised with consideration to the club culture and the specific environment where the athlete is situated.

The team sport study, *Successful talent development in soccer: The characteristics of the environment* (Larsen, Alfermann, Henriksen and Christensen, 2014), followed an holistic ecological approach, the article examined talent development among male under-17 soccer players in a Danish soccer club with a history of successfully developing several of its juniors to top-level soccer players. Findings demonstrated the importance of the environment and in particular the relationship between players and staff. It was these strong relationships that helped the players to develop a holistic lifestyle, handle dual career pressures (sport and school), work hard, and become self-aware and responsible for their own training. Furthermore, the environment was characterized by a strong, open, and cohesive organizational culture based on integrated values concerned with the balance of the player's daily lives in school and sport.

Summary: An important piece here supporting the balance of education and sport. Specifically, for the 16-18-year-olds in a rugby academy context who stay at their respective schools until A Levels are complete. There is still a need for a dual career focus at post 18 following a holistic approach and for support of the individual when their professional rugby union career ends. We need to reflect these wider transition issues in our investigation.

In an individual sport study Looking at success from its opposite pole: The case of a talent development golf environment in Denmark (Henriksen, Larsen and Christensen, 2014), here the holistic ecological approach is applied to the study of a struggling TDE, which is a golf Danish golf academy with limited success in producing senior elite athletes. The findings suggested that the struggling environment was characterised by features that are in opposition to those of successful ones i.e.. a lack of supportive training groups and role models; little understanding of and from the non-sport environment; no integration of efforts among different parts of the environment; and an incoherent organisational culture.

Summary: An interesting flip on the earlier studies and a creative research activity to highlight the gaps in a TDE. The focus on organizational structures, culture, rituals, role models etc remind us ensure our framework encapsulates the wider aims of the organization that it investigates and some of the systems and practices that underpin it.

In a further team sport study, *Holistic approach to athletic talent development environments: A successful sailing milieu* (Henriksen, Stambulova and Roessler, 2010). This study again assumes a holistic ecological approach focusing on the overall athletic TDE operated by the Danish national 49er sailing team and examines key factors behind its success in creating top athletes. To guide the project, two working models were developed. The ATDE working model serves to describe the environment's components and structure. The environmental success factors (ESF) working model serves to structure factors contributing to the environment's success.

Summary: This study is particularly interesting as the ATDE considers the most conducive learning environment for an individual in a team sport and both the ATDE and the ESF models are designed to be lifted and used as a template in other sporting environments and organisations. These may be a good base to build our own model upon and deserve further analysis. As a result of the specific context of our study (transition to professional rugby) where there are numerous influences on our athletes during their life stage (becoming an adult, leaving home, responsible for own finances, education / training decisions etc) our theoretical framework would be wise to follow a holistic ecological approach as used by Henriksen (2010). We need to dig down deeper into this area. Therefore...

Looking at: A multiple case study of successful athletic talent development environments in Scandinavia, Henriksen (2010) articulately and concisely described his two working models. The first model - The Athlete Talent Development Environment (ATDE) working model (Henriksen et al., 2010), is a framework for describing a particular athletic environment and for clarifying the roles, functions and influence of the different components and relations within the environment. In this study the key features that emerge from the different TDEs are that the environment is seen as series of nested structures focusing on people, processes, context and time. The main function such a system is to help promising young

athletes make a successful transition from junior to top-level senior sports. The young prospective elite athletes, therefore, appear at the centre of the model (fig 1).

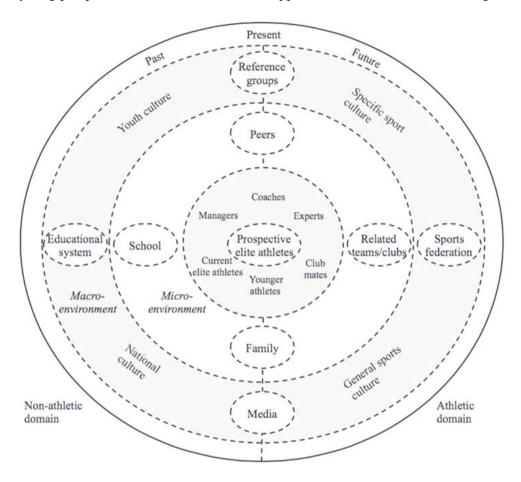


Figure 1: ATDE Model: Athlete Talent Development Environment (Henriksen et al., 2010)

Other components of the ATDE are structured into two levels (micro and macro) and two domains (athletic and non-athletic). The microlevel refers to the environment where the prospective elite athletes spend a good deal of their daily life and is thus characterized by real communication and interactions. The macro-level refers both to social settings, which affect but do not contain the athletes, and to the values and customs of the cultures to which the athletes belong. The athletic domain covers the part of the athletes' environment that is directly related to sport, whereas the non-athletic domain presents all the other spheres of the athletes' lives. Some components clearly belong to one level and one domain whilst other components may transcend levels and domains with the interdependence of various components indicated by encircling them with dotted lines.

In the outer layer of the model, past, present and future represent the time-line, illustrating that the environment is dynamic and ever-changing. Perceptions of past, present and future are simultaneously represented when talented individuals make decisions about future involvement, when sports organizations distribute resources and when clubs design talent development programmes. The relative importance of the different components in the environment also changes over time.

This model is ecological in the sense that it regards the development of an athlete as being influenced by the context in which this development takes place. The model is holistic in three senses: it includes both the athletic and the non-athletic domain; it includes both the micro and the macro-level; and it includes the development (past, present and future) of the environment.

Summary: This model can be easily adapted and modified to illustrate the transitional rugby union environment and context in which the athlete lives and functions. The model is player centred and therefore could be more poignant for the 16-18-year old athlete where the environment may be more development focused. We could easily adopt many of the components in our own investigation and embed in our framework.

The second model Henriksen *et al.* (2010) present is the Environment Success Factors model (ESF). This centres on the emergence of the organizational culture within the environment as is based on the organizational psychology of Schein (1990). According to Schein, 'culture is what a group learns over a period of time as that group solves its problems of survival in an external environment and its problems in internal integration' (Schein, 1990:111).

The focus of the ESP model is on preconditions, processes, individual development, team achievements, organizational culture and how these factors contribute to the environment success in developing talent. Taking as its starting point the preconditions provided by the environment, the model illustrates how the process in the form of daily routines has three outcomes: the athletes' individual development and achievements, team achievements (in team sports), and organizational development and culture. All of these are intimately interrelated and influence the environment's success.

Preconditions are the environment's resources. They include human, material and financial resources. Human resources include the number and proficiency of coaches, experts and managers. Material resources refer to such elements as facilities for training, accommodation and testing, and the state and availability of these facilities. These factors are all necessary for the talent development process but they do not guarantee success. Process refers to everyday activities in the given environment. These activities can be diverse and specific to the environment, but elements such as training, camps, competitions and social events are expected.

Individual development and achievements refer to the athletes' acquisition of psycho-social competences and athletic skills, and to the way these in combination lead to sporting success. Team achievements refers to the team's athletic success and is thus mainly relevant to team sports. Individual and team achievements are, of course, a product of the process, most notably countless hours of training, but they are also a product of organizational development and culture.

Organizational culture is central to the ESF model. To analyse the organizational culture of the environment, Schein's (1992) theory is incorporated into the model. Briefly, it outlines three levels: cultural artefacts, espoused values and basic assumptions. Organizational culture is characterized by the integration of the key basic assumptions into a cultural paradigm that guides the socialization of new members, provides stability and adapts the organization to a constantly changing environment. The ESF working model therefore predicts that the ATDE's success – that is, its effectiveness in producing senior elite athletes – is a result of the interplay between preconditions, process, individual and team development and achievements, with organizational culture serving to integrate these different elements.

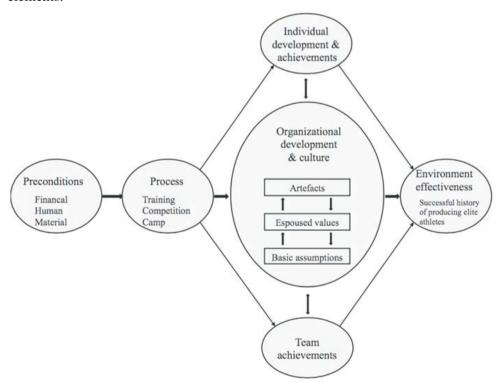


Figure 2: ESF Model: Environment Success Factors (Henriksen *et al.*, 2010)

The two working models (Henriksen *et al.* 2010) suggest that successful ATDEs share a number of features that may explain the environment's success in developing talented athletes: (1) training groups with supportive relationships, (2) proximal role models, (3) support of sporting goals by the wider environment, (4) support for the development of psychosocial skills, (5) training that allows for diversification, (6) focus on long-term development, (7) strong and coherent organizational culture, and (8) integrations of efforts (for a comprehensive description of the eight features and their opposite poles see (Henriksen, 2010:157–158).

The above list of features is comparable with Martindale (2005) and colleagues' (Martindale, Collins and Abraham, 2007) suggestions concerning effective talent development environments in a British context. They suggested that effective talent development environments are characterized by (1) a clarity and consistency of philosophy, objectives, and methods, characterised by long term and coherent aims and methods; (2) wide ranging and coherent messages and support with clear links to the senior level and active promotion of communications with outside influences such as parents; (3) systems facilitating the promotion of player development, including the promotion of flexible programs to suit the individual athlete and a focus on developing ownership, autonomy, motivation, and goal-setting skills in the athletes; and (4) an emphasis on age-appropriate development rather than age group success. Both lists of features provide suggestions as to what is important in designing successful talent development environments in sport in general.

Summary: Our interpretation of the 2 models illustrated here has had a major impact on our thinking. Our evolving framework outline has now undergone a significant shift as organisational culture now takes centre stage in our thinking as the athlete or transitioning athlete is on the outside only to be accepted and developed by the culture depending on; whether they are capable of coping with the new adult/professional 'process', if their 'individual achievements' (in particular the psycho-social competences) and efforts contribute to the 'team achievements' and ultimately enhance the 'environmental effectiveness' of producing elite athletes. This is the final piece in the jigsaw. We now have a fuller understanding and picture of what we want to investigate and a coherent range of topics that we need data from in order to achieve our objective. We will use all the elements we have uncovered above to shape our questions within our framework.

Eureka!!! a new C.A.R.E. transition theoretical framework to guide our investigation

The models presented and described above are general working models based on research findings and theoretical notions. We will use these models to guide our research considerations in the data collection and analysis phases of our larger study but first we need to mould these component parts and influences into our own theoretical framework that will guide our investigation.

As mentioned earlier in our musings a simple framework was sought by which to scaffold our thinking In order to investigate the interplay of factors within rugby's TD transition phase and explore the critical components that had most influence in this environment. The framework would also be used to help organise the study's interview questions and shape the data's presentation in the results section. For this purpose, the second author's C.A.R.E model was on which to mould our evolving theoretical framework (Grecic, 2016; 2017). Here the commonly occurring talent markers of physical, mental, social and emotional attributes are arranged to reflect the cognitive, athletic, relational, and emotional domains of player development (for a fuller description of what is included in each category and their theoretical underpinnings see Grecic, 2019).

This framework had been used as a basis of analysis in other sports (Grecic, 2018; Grecic and Ryan, 2018), and as the foundation of player development and physical education curriculum models (Grecic, 2016; 2017, Grecic and Jones, 2018). With new insights from our literature review above we were now able to assimilate all the elements identified in our summaries so that own theoretical framework could emerge from this process, that is a C.A.R.E. Transition Model: It must be noted here that in the specific transition phase that this study is using as its focus the C.A.R.E. acronym now refers to:

- C cognitive load
- A athletic challenge
- R relationship management strategies
- E emotional pressure

Below is the full CARE Transition Model which was developed for the purpose of investigating the transition phase of professional rugby in the UK. It embeds elements identified from the various studies described above and is interwoven with game specific knowledge accrued by the authors during their cumulative 60 years of coaching rugby.

C = Cognitive Load	Thought Influencers
In cognitive psychology, cognitive load refers to the used	
amount of working memory resources. Within TDE's for	Bailey and Morley
positive transitions athletes will need to consider their cognitive	(2006)
load to:	Jones et al. (2014)
a) appreciate the more complex technical and tactical input	Taylor and Collins
from coaches	(2019)
b) support learning / improve 'trainability'	Larson et al. (2013)
c) understand the competition structure / playing policy / how,	Henriksen (2010)
when and where opportunities will occur and how to maximise	
them.	

d) adapt to the reduced time for perception / action link and decision making in training and importance of quality practice. (Game representation - no mistakes!!)	
A = Athletic Demands Physical conditioning is the process of preparing the body appropriately for the physical demands of the sport the individual would like to engage in. In the context of TD transition athletes must consider: a) The professional pre-season conditioning programme b) The higher intensity physical training – gym, grappling/wrestling etc. c) The higher intensity / impact in game-based training / full contact etc. d) Injury management and continued training load	Balyi and Hamilton (2004) Jones <i>et al.</i> (2014) Taylor and Collins (2019)
R = Relationship Management Interpersonal - relating to relationships or communication between people. In TD transition athletes must consider their actions in respect of the environment and culture that exists. Therefore athletes need to be aware of: a) How to create positive relationships with teammates, coaches and support team b) Their role in the first team squad – expectations of input c) Impression management – how to communicate their explicit desire to get better, Q/As etc. d) Their changing relationship with parents, peers, partners.	Bailey and Morley (2006) Gagne Martindale et al. (2005) Henriksen (2010) Taylor and Collins (2019) Larson et al. (2013) Henriksen et al. (2014)
E = Emotional Pressures Intrapersonal - taking place or existing within the mind. Therefore the focus will be how athletes develop this within the environment and culture they find themselves. They will need to consider: a) The importance of Self-identity / awareness – reflection skills, and realistic performance evaluation. b) The need for Acceptance – how to gain respect from senior pros / how they will be challenged c) How to develop Resilience / mental toughness – coping strategies d) Expectations of their off-field conduct – dealing with 'free time' e) The additional financial, education, vocational demands – lifestyle management of being a professional rugby player	Bailey and Morley (2006) Gagne Martindale et al. (2005) Henriksen (2010) Taylor and Collins (2019) Larson et al. (2013) Henriksen et al. (2014)

Figure 3: The C.A.R.E Transition Model for Professional Rugby and its Thought Influencers

Conclusion

The aim of this paper was to shine a light on how a review of literature can be used to develop ideas in order to create a bespoke theoretical framework that can guide the research process. We have not presented an exhaustive range of academic sources from the area of Talent Development (TD), but have selected those which caused us to reflect, analyse, synthesise, adopt or reject ideas in the process of building our own framework. We have tried to make our thinking explicit in our 'summary' thought boxes so that others may gain a greater understanding of our framework's rationale and its evolution.

Ultimately our thoughts reflect a contemporary focus by assimilating multiple talent development elements that research identifies as bearing most influence on the transition from amateur to professional level performance. Of course, the 'building' or 'selection' process is heavily influenced by our own personal interpretations of 'merit' and these in turn are situated in our own lived experiences, coaching philosophies and personal biases from a career in sport and rugby. Whilst recognising these potential limitations of the process we are very proud of its result – our CARE Transition Model that now provides us a guide to investigate the journey from amateur to professional players at the first author's rugby club.

Personally, we both found resonance with the holistic environmental focus of the later papers we read and discussed, as well as the huge cultural influences on successful transition. Both of us have worked and coached rugby for over 30 years and could easily translate the different elements we discovered into day to day occurrences that would be recognised at many professional clubs in the UK and overseas. The framework therefore now offers a guide to exploration that should be easily applicable in the environments for which it has been designed. The next stage of the project therefore is to use this framework to investigate transition practice, attitudes, behaviours and environment at the first author's home club. The intention being that the framework will allow us to explore the phenomenon more deeply with the aim of uncovering unique and impactful factors that can underpin a truly bespoke and fit for purpose transition model for the club that will inform successful transition professional practice for many years to come. Only time will tell...

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Reviewer Comments

This paper highlights key considerations and brings to life the requirement for alignment between various planning processes in order to influence real-world talent development in sport. From experience, this is especially important within rugby academy environments, and thus, perhaps the authors might have identified, or made more explicit, some connections with younger groups of children in multi-skill activities where 'ages and stages' of participants are wide-ranging. Additionally, youth participant development, across any performance level, and regardless of the intended outcomes of a coaching programme (participation/talent development), at some stage, the focus turns to the needs of individuals within a group. This research, importantly, highlighs the in-depth planning that is required i.e. not only broad consideration of the way general-outcomes can be supported, but also how associated learning opportunities can be afforded to individuals in the rugby academy. This individualization may either differentiate complexity of intendedoutcomes and/or address different aspects of participant development across biopsycho-social domains for participants, which is certainly a strength of the paper. Planning for this TD framework can accelerate participant development, as well as preparing coaches for what may come within coaching practice so that they are equipped to deal with emerging needs of the performer.