

Getting in the Way: Investigating Barriers to Optimizing Talent Development Experience

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Abstract

Various studies have identified features of effective talent development environments and their impact on the development of successful athletes. In contrast, there has been limited investigation of failures in talent development practice. Accordingly, the present study sought to understand the perceptions of coaches about barriers to integrating support and optimizing experience for athletes in talent development. A series of focus groups ($n = 6$) were conducted with academy coaches, Heads of Youth, and national staff in elite English Rugby League ($n = 29$ $M_{\text{age}} = 41.2$, $SD = 6.9$). Data were analyzed using a Reflexive Thematic Analysis approach, with findings suggesting a number of complex factors acting as barriers to optimal talent development practice and, thus, the experience of the athlete. Three overarching themes were developed to encompass barriers to integrated support and optimal experience in elite rugby league: (a) the high-performance milieu, (b) a lack of integrated working practice and (c) failures of coaching practice. Results highlight the complexity of the overall talent development milieu and the utility of deploying negative case studies to further understand optimal practice. Implications for the applied practitioner are discussed, including approaches to support systemic talent development practice.

Keywords

Elite performance, talent development, talent development environment, pathway

Introduction

As research in Talent Development (TD) continues to widen in scope (Baker et al., 2020), there is a growing recognition of the nuance of appropriate development, rather than just identifying the “right” talent (Martindale, 2015). Yet, across sporting contexts, there remains the deeply complex challenge for Talent Development Environments (TDEs) of working with athletes seeking to reach the elite level, regularly competing at the highest levels of competition (Abbott et al., 2005; Swann et al.,

2015). The complexity of generating effective practice is exemplified by the typically non-linear nature of expertise progression, with early performers often dropping away while others emerge (Güllich, 2014; McCarthy et al., 2016). This reflects the hyper-dynamic nature of TD, with performance determinants changing over time in an individually specific manner (Van der Sluis et al., 2019). Indeed, those who experience a more challenging pathway (resulting in lower or perhaps “supressed” early achievement), are

often more likely to subsequently reach the very highest levels of performance than those who have a less “bumpy” journey (Collins et al., 2016b; John et al., 2019). This often leaves the dilemma of whether to prioritize long-term needs, or focus on more immediate rewards from short-term performance (cf. Abraham & Collins, 2011a; Bjørndal & Ronglan, 2020). In simple terms, at the individual level, TD is a highly complex phenomenon, making it very difficult to predict eventual outcomes (Williams et al., 2020). As such, perspectives of expertise are apparent for both talent developers and athletes alike.

The Talent Development Environment

Talent Development Environments (TDEs) have been a focus of research for the last 15 years, separately conceptualized as “all aspects of the coaching situation” that impact on the athlete’s development (Martindale et al., 2005, p. 354) and a dynamic system with the athlete’s immediate surroundings and their wider context, including organizational culture (Henriksen, 2010). Martindale and colleagues (2005; 2007) suggested a number of features of effective TDEs, as follows: (a) the need for long-term aims and methods, (b) wide-ranging coherent support and messages, (c) emphasis on appropriate development, (d) individualized and ongoing development, and (e) integrated, holistic and systematic development. These factors have now been validated across numerous international contexts (e.g., Curran et al., 2021; Hall et al., 2021; Li et al., 2015). Similarly, based on a number of single environment case studies in Scandinavia, Henriksen (2010) suggested a series of environmental success factors: training groups with supportive relationships, proximal role models, support of sporting goals from wider environment, support for the development of psychological skills, training that allows for diversification, a focus on long-term development, strong and coherent organizational culture and the integration of efforts (Henriksen, 2010). Usefully, Henriksen et al. (2014) expanded on these constructs, identifying that poor practice could be

characterized by the “opposite pole” of these factors. Notably, both conceptualizations of the TDE go beyond the typical organizational structure of an academy used in many sports. In contrast, they offer a broader view that considers the temporal and holistic nature of TD.

Potential Challenges for the Talent Development Environment

The characteristics of effective TD practice and the desirable outcome of a coherent and appropriate athlete experience are well established (Taylor & Collins, 2020). Yet, to attain this desirable outcome, there are a number of significant challenges posed by the complexity of the TD milieu, with numerous stakeholders and potentially incongruous interests across multiple environments (Bjørndal & Ronglan, 2018). A particular challenge appears to be the integration of working practice between the senior elite and TD level. For example, a 2010 study of 26 elite European football clubs reported a lack of regular or effective communication between the 1st team and academy leaders (Relvas et al., 2010). This lack of communication led to an overall breakdown in coherence, with the academy operating with a different orientation than was needed by the 1st team. From the perspective of the athlete, the absence of integrated working practice is a significant feature of incoherence (Taylor et al., in review). Furthermore, these differences may also exacerbate the well-established challenge of the Junior to Senior transition, with previous research in elite rugby league highlighting the differences between youth and senior levels (Jones et al., 2014; Taylor & Collins, 2021).

Adding to the challenge for the TDE, each individual performer brings an individual set of skills, experiences, and perceptions to the coaching situation. The role of psycho-behavioral skills in supporting the development of athletes is well established (Larsen et al., 2014; MacNamara et al., 2010). These psychological skills can shape an athlete’s perceptions and mediate their use of the various support inputs they receive (Toering et al.,

2009). Where not fully developed, a lack of psycho-behavioral skillset can prevent an athlete's benefitting from environmental inputs, regardless of how well designed the support (Taylor & Collins, 2019).

Coherence

As a potential solution to the challenge posed by multiple stakeholders and environments, the utility of developing shared mental models (SMMs) has been proposed as a means to promote optimal practice (Taylor & Collins, 2020). SMMs refer to the "overlapping mental representations of knowledge by members of a team" which, in turn, support greater team effectiveness (Van den Bossche et al., 2011, p. 285). In a similar manner to the shaping of curricula in the education setting (e.g., William, 2013), the target for these shared conceptual frameworks is the integration of support inputs and ultimately coherence of athlete experience. Coherence results when the different elements of an athlete's experience hold logical connection and are mutually reinforcing. This can be seen horizontally across a level of performance, where athletes experience complementary coaching and adaptive support based on changing demands. Coherence can also be vertical, where multiple stages of a pathway build chronologically from previous involvement towards long-term needs (cf. Taylor & Collins, 2021). Webb et al. (2016) suggested that coherence was underpinned by a clear understanding of the needs of a performer at each stage of the pathway. Conceptually, these shared understandings were proposed to facilitate the use of complementary and adaptive methods to be used in an age and stage appropriate manner.

The operationalization of these shared understandings among multiple stakeholders and the extent to which different inputs to the athlete are systemically combined is referred to as integration (Taylor et al., In Review). Horizontal integration of different processes would see stakeholders across a stage working with the athlete in an agreed fashion (coaches, sports science support, parents, schoolteachers etc.) to optimize their experience. Similarly,

vertical integration is the extent to which working practices are coordinated through the different stages of an organization or pathway (Abraham & Collins, 2011b; Taylor & Collins, 2020). Importantly, integrated working practice should offer the athlete an age- or stage-appropriate role, with younger performers gradually becoming more and more responsible for the inputs that influence their development (Penney & Kidman, 2014). The target outcome of integration is a coherent athlete experience, with multiple actors engaging in a coordinated manner (Andersen et al., 2015) towards the achievement of commonly understood goals. Thus, overall coherence of the broader athlete experience appears to be the result of consistent integrated working practice, involving coaches across and between levels, external stakeholders and the athlete themselves (e.g., Larsen et al., 2020). From a TD perspective, the ability to develop and promote coherence is therefore an important feature of practitioner expertise.

This expertise is multifaceted, however, and attention to the distinct but complementary elements is important for effective practice. For the TDE to work towards the "ideal" principles of practice suggested by Martindale et al. (2005) and Henriksen et al. (2010), it appears that there are a number of interacting elements of good practice. Yet, while there is evidence of barriers experienced by TD athletes (Mitchell et al., 2020; Taylor & Collins, 2019) and the characteristics of ineffective TDEs (Henriksen et al., 2014), there have been no investigations into what *prevents* integrated working practice and coherence for the athlete. In essence, therefore, the present study moves beyond descriptions of poor practice and their consequences, to the identification of factors preventing the development of SMMs in the TD context. We believe this to be an important step, because in the real world, the management of a TD process is not as straight forward as positive case studies might suggest (Henriksen et al., 2014). By identifying specific barriers, we aim to offer TDEs and practitioners an opportunity to work with and around these barriers to optimize their practice. In addition, while negative case studies are becoming a more

popular method of investigation, they remain limited in number, a critical limiting factor for evidence informed real-world practice (cf. Kiely, 2011).

As a well-established and mature elite sport, rugby league offers an appropriate environment to understand the nature of barriers to effective TD practice. The elite level of rugby is dominated by leagues in Australia and the European Super League (SL). The SL competition involves 12 teams (11 English and 1 French). All SL clubs are licensed and, as part of the licensing arrangements, require an “accredited Academy.” Academies in the UK operate an under 19 squad with the aim of transitioning players to their respective senior teams. Running parallel to this, the Rugby Football League (RFL), as the National Governing Body (NGB) in England, run age group international representative sides to supplement academy player development. The context was viewed as particularly relevant to investigate potential barriers given the sport’s reputation for high quality TD practice and record of progressing players. In essence, rather than weighing up the relative effectiveness of practice in the pathway, we were interested in identifying the barriers to truly optimal practice in a well-functioning talent pathway. Thus, the specific aim of the study was to understand what barriers may prevent TDEs being able to offer an optimal experience to athletes.

Method

Research Design

Given the desire to produce usable knowledge for the TD practitioner, a pragmatic research philosophy was utilized for conducting the study. Pragmatic approaches suggest the employment of methods with the aim of answering questions and providing tentative solutions, rather than being driven by a distinct epistemological approach (Giacobbi et al., 2005; Jenkins, 2017). Pragmatism also suggests the prioritization of questions and methods that are practically meaningful rather than seeking generalized truths or subjective constructions (Denzin & Lincoln, 2008). Reflecting this pragmatic orientation and the aims of the study,

a focus group methodology was deemed most appropriate to understand the causes of suboptimal TD practice among a specific population of practitioners. An advantage of the focus group method is the potential to draw from a set of complex personal experiences, beliefs, perceptions, and attitudes through moderated interaction in a group (Morgan, 1996). Focus groups were also viewed appropriate given a lack of sensitivity about the topic area associated especially with its prevalence in participant’s professional practice. Focus groups are distinct from interviews as they allow for informal group discussion among a purposely selected group of individuals. These discussions have the potential to be more naturalistic, allowing participants to speak freely among peers (Wilkinson, 1998). Consequently, they offer the opportunity to hear from different perspectives and paradigms, providing more than the sum of individual interviews with data on the extent of diversity within a group (Morgan, 1993). To ensure a variety of perspectives, group sizes were selected to allow participants to discuss their experiences and ensure that a range of viewpoints were raised (Morgan, 1996).

Furthermore, focus groups are also different from group interviews, with participants engaging in facilitated conversation, rather than being controlled by a researcher. This peripheral role allows for the generation of collective views and the meanings behind those views (Nyumba et al., 2018). Supportive of this and linked to the research aim, the first author played a peripheral role in discussions (Krueger & Casey, 2000). This allowed conversation to flow, but ensured marginalized voices were heard and, where necessary, guide participants with probes to keep the conversation on topic (Morgan, 1996). Some examples of this more decentered role included the following researcher questions to guide discussion: “What factors prevent optimal TD practice in your context,” participants were offered probes such as the following: “What causes this issue?,” “Has anyone else experienced this?” and “Can you offer an example?” (Denzin & Lincoln, 2011).

Participants

Subsequent to approval from the Institutional Review Board, a purposeful sampling criterion was used to approach academy and national staff by invitation through the RFL. This led to the recruitment of a total of 29 participants (all male) ranging in age from 29 to 55 years ($M = 41.2$, $SD = 6.9$) taking part in six focus groups. Participants were coaches at a SL academy, coaches in the RFL player development department (henceforth C), or the Head of Youth in a SL academy (henceforth H). The sample provided representation from every club and the National Governing Body at the highest level of performance in English rugby league. The player development coaches of the RFL, although not being involved in the day-to-day running of academies, were included given their central role in the process of player development over the course of a player's early career. The breadth and depth of the participant group is especially relevant given the recent call for further research into the role and perceptions of the coach of organizational dynamics (Larsen et al., 2020). Prior to data collection, the first author engaged informally with all participants with the aim of building rapport and trust (Morgan, 1996). Subsequently, all participants were informed that the data would not be attributed to them, nor would any feature of the data be used to identify them.

Data Analysis

Following initial set up, the focus groups ranged in duration from 38 to 42 minutes ($M = 40.4$, $SD = 1.62$) and were transcribed verbatim, then checked against recordings for accuracy. Analysis was completed using a Reflexive Thematic Analysis (TA) approach, deemed most suitable given its utility for examining, in depth, the factors that underpin a particular phenomenon (Braun et al., 2018). TA, in contrast to coding reliability or codebook approaches, involves the development of themes as patterns of shared meaning underpinned by a central organizing concept (Braun & Clarke, 2020). Themes are generated through considerable engagement with the data and are mediated by the researcher's values, skills, and experience.

Therefore, rather than aiming for reliability, the process is inherently subjective and reflexive. TA is also advocated for research that aims to understand how personal experience is located in a particular socio-political context, across a data set, rather than on unique features of individual experience (Braun & Clarke, 2021). Finally and most pertinent to the applied nature of this study, TA is most appropriate for research that aims to offer implications for practice (Sandelowski & Leeman, 2012).

While not seen as a recipe, data analysis utilized the six-step process for thematic analysis as initially outlined by Braun and Clarke (2006). Recognizing the considerable interpretive role of the researcher, rather than being an entirely inductive process, data were coded using both inductive and deductive approaches (Braun et al., 2018). The first phase of analysis involved the first author's reading and re-reading transcripts, highlighting relevant material, and making annotations. This was followed by generation of semantic (capturing surface meaning) and latent codes (capturing the assumptions that underpin the surface meanings) (Braun & Clarke, 2019). Codes were then organized into initial themes as patterns of shared meaning, through an active and interpretative process (Braun & Clarke, 2020). Recognizing that themes do not simply emerge from the data, but rather are actively created by the researcher (Braun & Clarke, 2019), the second author acted as a critical friend and a reviewer of initial themes to consider their validity in relation to the data set. In the final phase, themes and sub-themes were named by the research team, based on patterns of shared meaning (Braun & Clarke, 2019). All phases of analysis took place flexibly, allowing researchers to move backward and forward between steps, using QSR NVivo Version 12 as a tool to support the process.

Trustworthiness of the Data

Given the centrality of trust and rapport among participants in qualitative research (Sparkes & Smith, 2009) and most especially in deploying focus group methodology, the first researcher deliberately sought to cultivate a trusting environment prior to the conduct of focus groups. The building of trust and rapport was further

enhanced by the partial “insider” status of the first author’s career biography in a similar role to the participants in other elite sports (Berger, 2013). On this basis, Recognizing the need for reflexive practice, a journal was used to record thoughts and emotions related to the interpretation of data (Patton, 2002). Similarly, throughout the process of data collection and analysis, the second author acted as a critical voice, demonstrating a reflexive acknowledgement of the existence of other plausible perspectives (Smith & McGannon, 2018).

To enhance trustworthiness, member reflections were utilized, and all themes and sub-themes were shared by email with a representative cross section of participants ($n = 5$ coaches and $n = 5$ Heads of Youth) from across focus groups. Rather than seeking verification, member reflections encouraged the generation of further dialogue and understanding of meaning (Smith & McGannon, 2018). This gave participants the opportunity to provide additional insight to enhance findings. Engagement with member reflections was mixed and, although all participants were offered a follow up interview, the majority asked to reflect in email dialogue ($n = 5$) while others did not respond

($n = 2$). Although a number of further interviews were conducted ($n = 3$), those who declined can be explained by the high quality of participant focus groups and the busy nature of their roles. Member reflections emphasized the influence of the high-performance milieu and frustrations with poorly integrated practice through an organization. Notably, for the conduct of future research in expertise, some participants commented on their utility in their own reflective processes, and one noted “It’s nice to actually be involved in this kind of research” (C).

Results

Following thematic analysis of focus group data, three themes (the high-performance milieu, a lack of integrated practice, and coaching failures) were developed to understand barriers to optimal experience for the individual player. Table 1 presents all themes and sub-themes with exemplar quotations to allow the reader to engage with the experience of the participants and to illustrate the analysis.

Table 1. Barriers to optimal player experience

Theme	Sub-theme	Raw data exemplar
Pressures of the high-performance milieu	Business demands	“There is pressure to move players up. They (owners) need to reduce the average salary to get the best top end players.” (H)
	Short-termism	“One of the big ones is the time factor that a head coach has . . . his job is on the line, owners need results.” (C)
Lack of integrated working practice	Number of voices around the player	“It is all about consistency of message, we need to be on the same page. We all need to sit around a table and decide what the current messages are for that player.” (H)
	Lack of intra-club role clarity	“A coordinated system of doing it is important; you can’t just rely on getting the coach on a good day. It is coordinating over years; it cannot be ad hoc.” (H)
	Impact of unhelpful inputs	“I think they have got different people telling them different things, and it gets confusing as a player.” (C)
	Player’s inability to utilize support	“They need to be able to self-evaluate, then they will be able to take what they need from it.” (H)
Failures of coaching practice	Coaches unable to meet player needs	“I think the levels of understanding aren’t good enough, I did it myself, I got jobs because of what I did as a player.” (C)
	Lack of a psycho-behavioral skills emphasis	“Players have often had people do it all for them. . . Too often, players expect the coach to do it for them, the players have to take responsibility.” (C)
	Lack of challenge	“A lot of these lads, they just get too much smoke blown up them.” (C)

Pressures of the High-Performance Milieu

Focus groups reflected on the pressures of the high-performance milieu acting as significant barriers to the overall effectiveness of long-term TD practice. Cultural and socio-political realities were perceived to impact on the orientation of all support figures who worked with young players and the priorities of the wider organization.

Business Demands

A particularly prevalent barrier was the financial imperative, often driven by club owners, requiring young players to make effective contributions to first team performance as early as possible. Pressure from club management was felt by all in the club structure to progress the performance levels of players quickly: “Owners, they just want to see players progressing quickly” (H). Focus groups attributed the source of pressure being the need to evidence return on academy investment. In some clubs this was driven by a need to stay within the salary cap as a result of increasing senior player salaries. For others, there was a desire to minimize salary costs and maximize team performance at the lowest possible cost.

Similarly, SL clubs often run relatively small squads, either because of the cost of senior players relative to the salary cap or overall financial limitations. Consequently, the size of the senior squad size often led to players being drafted into training or playing before they were ready. This meant that the first steps in the senior environment were rushed and lacking appropriate preparation: “Sometimes it is ‘I need a winger in this session,’ and you don’t expect them to get that opportunity. You can’t prepare them properly” (H). Participants reflected that this often left young players at a long-term disadvantage and in a number of cases led to being “labeled as not good enough” (H).

Short-termism

The need for SL teams to win and the short-term judgements conferred on senior coaches as a result of their week-to-week performance led to many adopting a short-term focus. This was

seen to work against the interests of young players who, for the most part, required a longer-term approach. Focus groups discussed the impact of performance pressure on seniors and how it changed their approach. Several members of focus groups had previously coached at senior level. One reflected on his experience of the role: “Everything going so fast with the need to win games, you feel like you have to work with the senior players to get them ready, you forget the need to work with the younger ones” (C). The inherent tension between the need to win now—and develop young players for the future—was seen as a critical barrier to optimal developmental experiences for young players:

The coach’s job is on the line, but he is also responsible for the development of that player. I am fortunate that I’ve worked with some good ones at that, but also some very poor ones (H).

The pressure conferred by the demands of the elite game often led to senior coaches adopting sub-optimal long-term strategies for working with young players. They were given restricted roles, limiting the development of characteristics that could have distinguished them as elite players later in their career:

It comes back to the challenge that comes with winning games getting in the way of genuine development. We all talk about developing decision makers and independent thinkers, but we lose a game, and it returns back to, why did you do this and why did you do that. Results get in the way (C).

Focus groups felt that coaches who didn’t see longevity in their role were unwilling to consider the long-term needs of players, especially those needing a longer-term approach:

Sometimes the players are on a hamster wheel, they run like mad for 10 months, they aren’t ready yet. Take a three-year planning process, give them a profile, and assess them in all aspects of their game. Say they aren’t going to be ready in 12 months, but ready in two, three or four years (H).

A short-term focus was also seen to affect the philosophies of senior coaches and acted as a significant blocker to stage-appropriate experience. This encouraged some senior coaches to operate with a singular focus on winning the next game. The lack of a long-term view, considering both short- and long-term needs (cf. Abraham & Collins, 2011b) acted as a barrier for all in the club structure, preventing appropriate expectations of young players.

The consequence of short-termism was often a high turnover of senior coaches and the need for participants to create new working relationships with different senior coaching teams: “Clubs are unstable and bringing in the wrong coach can create a major problem [in] relationships, coaching philosophy, everything” (H). Focus groups also perceived that short-termism prevented clubs seeing the value of investing in a reserve grade (a bridging team between academy and senior teams). This prevented an appropriately staged increase in challenge for young players, and this gap was often too great a step change for players to cope with: “We have a separation between 1st grade and academy, and no matter what you do, there will always be a separation” (C). As a result, the step from academy to first team performance was too big a step change in challenge for many players.

Lack of Integrated Working Practice

Focus groups also reflected on a number of factors that prevented the individual player receiving and utilizing the support that was available to them. This lack of appropriately integrated practice left players confused and unable to maximize their experience.

Number of Voices Around the Player

Participants frequently reflected on the impact of the number of voices around the player and the effect of their input. Young players were subject to a wide range of different advice: “Young players stumble because they get too many people telling them too many different things” (C). This was perceived to be an even greater issue as players increased their individual reputation, often accumulating more

people with a desire to influence their trajectory: “With everybody wanting their little bit of the player to be able to say that they helped him along the way, especially when they are perceived to be very high potential” (H). An experienced coach, reflecting on the challenges he perceived as being critical to player development suggested that “it is everyone—parents, friends, scouts, agents, managers, anybody that you can think of” who actively affect the experience of the player. This was especially the case for young players who were going through periods of high challenge and seeking the support of others, as depicted below:

I had two calls from agents telling me who should be playing, how they should be playing. I got a call off an agent when we dropped a player who was nowhere near, telling me how wrong I was. I got a call from a parent about her son needing to do x, y and z in training to keep him happy. I think our young players get it from everywhere (C).

For the TDE, the higher the number of stakeholders, the greater the risk to the individual player. As the number of inputs increased, appropriate action was harder to coordinate. Often leading to confusion for the player.

Lack of Intra-club Role Clarity

Similarly, a lack of role clarity among club staff acted as a barrier to appropriate experience for the player. Exemplified by the words of one coach, this was seen as a particular problem with players who were at the start of their transition into the senior squad:

I’ve had one of the coaches knock on the door to talk about two players who have spent the whole preseason with 1st grade, and he was telling me that I should be doing some more work with these boys because they aren’t good enough. I was kicking myself because I should have picked him up and thrown him through the door. He’s had them all the way through preseason, and he is having a f***ing pop at me because they aren’t good enough!

This lack of role clarity, at both the individual and organizational level, led to suboptimal development experience for the player and intra-organizational conflict. Young players were often treated as guests in senior training, without a focus on their own developmental needs. Indeed, some participants experienced their efforts to generate role clarity being ignored by senior coaches with different priorities:

I sent a player up last year . . . I went to watch the session, and the first thing that I saw was the coach doing all the things that we had asked them not to do! Afterwards they asked, “Why is he coming up to us?” (C).

This often led to the needs of young players failing to be met by senior coaches lacking an understanding of their role in developing younger players:

I didn’t think the young players were getting enough attention or development. I suggested that when the first team players went home at lunchtime, that they have another block of specific work. I think there is a massive void between junior and senior players (C).

A number of participants suggested that the absence of a “transition coach” who worked across both the senior team and academy was a critical feature in being able to integrate the working practice of both departments. Without this role, players were seen to miss out on the necessary developmental experiences required to manage the step change in challenge.

Impact of Unhelpful Inputs

Although barriers to effective practice were created by the large volume of inputs to the athlete and a lack of role clarity; it was the advice of unhelpful actors that were deemed to be the most significant barriers to optimal player experience. Often, these unhelpful inputs came from peripheral figures not considered a part of the player’s support network: “Scouts can tell them what they want . . . but, that scout might have been the player’s first point of contact with the club as a 14-year-old . . . they might trust them” (H). Some parents appeared to have an

especially negative impact on a player’s experience. Participants described the impact when parents inappropriately shaped a player’s views, especially when their son was performing at a lower level than their peers. Exemplified by a coach’s reflections: “You are going to get uneducated parents . . . there are jealousies. It is nearly impossible” (C). This was the same for senior coaches, who could have a significant impact on a young player: “A throwaway comment from a head coach that could be made to a more senior player can have a massive impact. They will remember that more than years of work by an academy coach” (H). The maladaptive impact of unhelpful inputs was perceived to be particularly prevalent during phases of high challenge such as a period of poor performance, or when adapting to higher demands.

Player’s Inability to Utilize Support

Reflecting the bi-directional nature of the coaching process, the individual player was perceived to have a critical role in supporting integrated working practice. Those players who lacked the skills to seek support actively—and use it—failed to learn from their experiences: “They need the social skills to speak to coaches about how they can get better and have good social skills with physios and S&Cs [strength and conditioning coaches]; [that] makes a big difference” (C). A particularly prevalent feature of this inability to utilize support was the capacity of the player to generate their own feedback, or use that of others, appropriately (cf. Carless & Boud, 2018). Participants reflected that players often didn’t use feedback appropriately, ignoring well-integrated support. For example, a coach, reflecting on a high potential player said, “He didn’t want to accept any feedback, he didn’t accept anything at all.” Yet, coaches also discussed players that hadn’t been able to discriminate between contradictory inputs and take appropriate action. As one coach said, “Too many follow everything that they hear; it takes a strong player to go, ‘No, this is my pathway, and I appreciate you giving me feedback, but I know where I am going’” (C). This lack of individual capacity was perceived

to become apparent when players were subject to an increased range and intensity of stressors as their performance progressed. It also served to highlight that the individual player has a core role in the support network, rather than being a passive recipient.

Failures of Coaching Practice

In addition to the barriers of the high-performance milieu and poorly integrated practice, participants reflected on coaching errors, and those of others that prevented optimal experience for players. These errors were seen on all levels from the macro (whole pathway) to the micro (individual coach to player interactions).

Coaches Unable to Meet Player Needs

With coaches often transitioning from playing careers, they felt unable to meet the needs of individual players. A lack of knowledge of development needs and effective TD practice led to younger coaches simply copying the practice of senior coaches: “Some of the problem is that (coaches) might then treat the academy as a watered-down first team, and coach inappropriate things” (C). Coaches were perceived to operate effectively at the team level, but often to the detriment of the individual player. Exemplifying the lack of knowledge to meet player needs, one coach reflected:

My theory is that the most uneducated people in the club are the coaches because they are just ex-players. The reason that their path isn't managed well is because we are just trying to figure out what to do with them.

Participants also perceived that senior coaches failed to meet the needs of young players, lacking a reference point for their overall developmental journey. One of the participants reflected on his previous role as a senior coach:

One of the things I have done as a head coach is be[ing] very frustrated and lacking patience, I needed to put myself in their shoes. It is important that we have a much better understanding of the player...sometimes to bowl them out in

front of everybody isn't a good way to go, and I have done that (C).

Focus groups also offered their perceptions of senior coaches and their lack of understanding of developmental needs. One Head of Youth commented, “How many times have we seen an academy player been sent out to stand on the wing, and I have done it myself without understanding, they f*** up and get an absolute bollocking.” This lack of focus on the individual was believed to have a detrimental effect on young players who were often significantly impacted by the input of senior coaches.

Lack of a psycho-behavioral skills emphasis

Participants described the failure of coaches to emphasize the development of a psycho-behavioral skillset as a critical barrier to appropriate developmental experience: “We have loads of big, strong, athletic players who are technically and physically quite good, but mentally poor. They just drop away” (C). Rather than being a deliberate decision for pathways to deprioritize psychological development, it appeared to be a lack of knowledge: “I don't think we know how to do this” (C). Thus, focus groups acknowledged the need for an emphasis on psycho-behavioral skills, but these capacities had rarely received any deliberate focus through the developmental journey. The lack of psycho-behavioral emphasis was perceived to be especially important when the challenge level increased and players lacked the skills to be adaptable, independent, or resilient.

Lack of Challenge

Concomitantly, the largely positive and challenge-less pathway experiences of players meant psycho-behavioral skills were rarely tested as players progressed. Focus groups perceived this overall lack of challenge or experience of negative emotional disturbance as a failure of coaching practice and a significant barrier to long-term development (cf. Taylor & Collins, 2021). These failures were often perceived to begin in the community game (prior to academy entry):

A lot of our players who have been in these super teams as young players struggle. They

are not used to adversity, getting beaten, being challenged by bigger stronger players. Having those experiences to draw back on makes them mentally stronger (H).

Similarly, a number of participants believed that academy coaching perpetuated challenge-less experiences for player: “It is easy for an academy coach to keep giving positive feedback, but it isn’t what the kid always needs. Understanding them and giving the appropriate feedback is critical” (C). The failure of the coaching process to provoke emotional disturbance was also seen as a barrier to effective skill development. High challenge levels were perceived to draw attention to career limiting weaknesses prior to the senior game: “You can give them the same feedback for two years, but until it is really exposed and tested, they might not realize how important it is” (C).

These factors contributed to the failure of coaches to adequately prepare players for the challenges presented by the senior environment. As one coach stated, “We can’t just expect them to be chucked into an environment where winning is everything and expect them to be able to cope if they haven’t experienced a little bit of it.” These marked differences in the academy context and senior coaching were perceived to act as a barrier to long-term development.

Discussion

The specific research aim was to understand from the coach’s perspective what barriers prevented TDEs generating optimal experience for the TD athlete. Findings offer a grounded view from an extensive sample of TD coaches working in elite sport, suggesting several factors that may prevent effective practice and optimal athlete experience. Barriers were perceived to be a result of three primary factors: (1) the pressures of the high-performance milieu, (2) a lack of integrated working practice, and (3) failures of coaching practice. The range and depth of barriers discussed by members of focus groups, often highly successful TD coaches or leaders, highlight the value of an unvarnished approach to research. Previous research would suggest that, ideally, performance organizations

should seek to create a fully vertically integrated process of TD throughout an organization (Webb et al., 2016). Yet, studies such as the present, and others of a similar vein, show that even in talent pathways with a record of success, the management of effective TD is far from straight forward (Henriksen et al., 2014). We will discuss the findings in relation to the Martindale et al. (2005) model of effective TDEs.

At several clubs, there was an inherent pressure for players to be accelerated and to be readied for 1st team performance, and clubs often felt the need to use shorter-term aims and methods. Pressure impacted senior coaches who needed to prepare teams, with limited financial resources, to win at the weekend and retain their jobs. It was a pressure also felt by Heads of Youth needing to justify their player development process to club leadership, who often expected young players to progress rapidly. In the presence of these conditions, it appeared difficult to maintain a long-term vision, purpose, or identity (cf. Henriksen & Stambulova, 2017).

The TDE’s ability to offer wide-ranging coherent support and messaging was challenged by the number of different stakeholders that populated the overall milieu. This made it difficult for clubs to coordinate or work effectively with those influential in a player’s development. This supports previous findings characterizing the TD milieu as highly complex, with a variety of actors with often competing agendas (Bjørndal & Ronglan, 2018). It also highlights the potential for high potential athletes to be subject to an accumulating number of voices, all seeking to impact the developmental trajectory of the individual athlete (Taylor et al., 2021).

Although as younger players were training and often playing at the highest level of the sport, focus groups highlighted that they still had a wide spectrum of developmental needs. The requirement for senior teams to win, the methods adopted by senior coaching teams, and a lack of knowledge of, or empathy with, developmental processes held the potential for some players to miss stage appropriate

experiences, thus stunting their overall growth (cf. Storm et al., 2020). These failures in developmental practice were exacerbated as players often lacked appropriate challenge at earlier stages of their pathway journey (Collins et al., 2016b; Nash & Taylor, 2021). This was coupled with a step change in challenge following rapid promotion of players to the senior team, or a lack of a graduated increase in challenge post academy (Taylor & Collins, 2021).

Additionally, a lack of role clarity meant various stakeholders were often unaware of who was responsible for the developmental needs of the player, with a lack of regular individual review processes (cf. Gibson & Groom, 2018). The lack of these processes emphasizes the need for long-term individualized and ongoing development of athletes (Collins et al., 2016a; Henriksen & Stambulova, 2017). These factors, coupled with the mismanagement of challenge, were perceived to be a critical barrier for the TDE aiming to optimize their practice. Ultimately, a variety of complex and multifaceted barriers mitigated the efforts of the TDE to generate an integrated, holistic and systematic approach.

Notably, focus groups suggested a dual focus whereby the individual characteristics of the player *and* environmental factors were causative of a suboptimal experience for individual players. As players became subject to the range of highly challenging, complex, and competing demands offered by the senior environment (Røynesdal et al., 2018) it was perceived that players needed to manage and actively discriminate between different and often contradictory inputs. Those players whose pathway hadn't required the development of relevant skills and navigation of appropriate challenges were seen to struggle with these demands. This not only supports the contention that long-term development is facilitated by psychological skills but additionally, that these skills underpin an athlete's ability to both cope with and learn from challenging experiences (Larsen et al., 2014; MacNamara & Collins, 2010). Thus, psychological skills were seen to shape an athlete's experience and their overall

perception of events (Savage et al., 2017; Savage et al., 2021). This appears to suggest a complex dynamic between the agency of the individual athlete and how the environment acts upon them (Taylor & Collins, 2019).

Limitations

Findings of the study aside, it is clearly not without limitations. For example, the retrospective nature of enquiry, with participants being asked to reflect on previous practice, generates a risk of recall bias. Yet, given that all participants were current practitioners within an elite club or in the national academy pathway, the issues being discussed were key elements of their current and ongoing professional practice. As another potential limitation, asking participants to reflect on their personal practice in a focus group setting may have led to self-presentation effects or polarization of the group (Morgan, 1996). Similarly, while the use of focus groups may allow for a rich dialogue that is greater than the sum of individual interviews, it doesn't allow for an in-depth investigation with a single participant. These limitations were partially mitigated using member reflections, where participants reflected on the overall themes of the broader data set, and, of course, by the number of open expressions of failure from the participants in the focus groups. It is also clear that the sample lacks gender diversity, both among participants and the athletes they coach (Curran et al., 2019), albeit an accurate reflection of the current milieu in the sport. Given that the aim of this study is not statistical-probabilistic generalizability (cf. Smith, 2018), these factors should influence the reader's consideration of the transferability of findings (Tracy, 2010).

Future research should explore the nature of the causes of suboptimal transitional experiences in other contexts and sports. In seeking to build on the current findings, research may also consider approaches to the development of an individual athlete's capacity to engage with the complex TD milieu and how this might be integrated into a developmental process. Finally, focus groups were asked to reflect on their experiences of barriers to

effective practice in their domain. This study Does not seek to offer an evaluation of the overall effectiveness of TD in rugby league. Indeed, it is perhaps an indicator of the quality of the sport's leadership that they were open to considering barriers to optimal practice. The importance of this *via negativa* approach is one that has been encouraged in the broader literature (Gilovich et al., 2002), but has so far been underutilized in sport and especially TD research.

Practical Implications

Seeking to offer recommendations for the TDE, recent work has highlighted the value of generalized planning that can be continuously adapted for individual athlete needs (Bjørndal & Ronglan, 2020). Building on concepts of this nature, we would suggest the use of a top-down *and* bottom-up approach to mitigating barriers to optimal experience. From the top down, coordinating and orchestrating the variety of inputs to the athlete. We would suggest that an effective way of operationalizing this would be through the development of SMMs. As a result of the number and influence of a variety of internal and external figures, this would ideally be done between levels of an organization and external stakeholders (Webb et al., 2016). The focus for the SMM would be generation of an understanding of an athlete's developmental needs as well as role clarity for different stakeholders. This may help to mitigate some of the organizational pressures of elite sport, with long-term planning being supported through coherent messaging up and down a pathway, based on a strategic and nested agenda (Collins et al., 2016a; Henriksen & Stambulova, 2017). For clarity, we certainly do not believe that the generation of SMMs are a "magic wand" solution to the socio-political barriers identified in this study. They do however have the potential to improve the quality of integrated working practice within and across pathways. We would also suggest that if appropriately generated across *all* stakeholders, the business case for TD may be clearer. For example, if the CEO of a club understands the long-term process for a young player to succeed at the elite

level, they will be better placed to support player development with their own decision making.

Noting the often-identified difference between the nature of senior elite and developmental coaching, while different groups of athletes require a different diet of coaching support, this support is often offered by the same coach. If performance organizations are to truly optimize their provision, senior coaching teams will need to cater to a wide range of developmental needs and as such require the coaching skills to do so. A truly integrated approach should therefore aim to offer systemically—and systematically—a vertically coherent experience for the athlete, with all performance levels acknowledging previous player experience, while still working towards long-term needs (Taylor & Collins, 2020). The integration of efforts across and between organizations through effective communication (Aalberg & Sæther, 2016) and the development of SMMs should be an area of continued applied study.

In addition, focusing on support conferred by the environment alone and seeing the individual athlete as a passive figure, is likely to yield suboptimal outcomes for both athlete and TDE. There is a need to prepare the athlete for the realities of the high-performance milieu, alternative environments, and a life outside sport (Jones et al., 2014; Williams & MacNamara, 2020). In supporting the agency of the individual athlete, there is need for TDEs to have a specific focus on skills that underpin an athlete's ability to take responsibility for their development and utilize various sources of information (Røynesdal et al., 2018). We would therefore recommend that, from the start of an athlete's journey, they are prepared to engage with the various information sources around them. A suggested approach would be the development of an athlete's Epistemological Chain (EC) (Grecic & Collins, 2013). An appropriately developed EC, the linkage between personal beliefs about knowledge and learning to make decisions, can help performers evaluate and make judgements about the input they receive. To support this, TDEs should

actively develop the declarative knowledge of athletes and offer opportunities for its use in the “shades of gray” represented by the real world, rather than as the black and white truth. These processes ideally would be followed up with cycles of debrief and stimulated critical reflection (Collins et al., 2016a). In doing so, there would be development of a “capacity to learn,” underpinned by conceptual knowledge (cf. Claxton, 2014) and encouragement of critical engagement with information as a process, rather than input to be received (Carless & Boud, 2018).

Finally, while previous studies have highlighted the difficulties faced by young performers when they reach senior levels of performance (Jones et al., 2014; Mitchell et al., 2020), a typical solution is the increased provision of supportive resource around the athlete. These data suggest that, while there is clearly a need for the provision of appropriate support, there is just as much need to focus on the capacities of the individual and their long-term needs. We would therefore emphasize that the athlete’s perceptions and experience should be *the* critical consideration for those who support development. Additionally, coaching and athlete support should not be viewed as something *done to* the athlete. The clear additional benefit of this approach would be in framing a truly “athlete-centered” approach supportive of their independence as a performer (Kidman, 2010).

Authors’ Declarations

The authors declare that there are no personal or financial conflicts of interest regarding the research in this article.

The authors declare that they conducted the research reported in this article in accordance with the [Ethical Principles](#) of the Journal of Expertise.

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