Article

Coherence in Selection: The Influence of Coaches' Views and Beliefs on Nominations for a Male Rugby Union Talent System

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Abstract: Selection is a key process for a talent system, requiring stakeholders to make decisions regarding athlete suitability for the increased resourcing of a specific talent development environment. Most selections require coaches to make judgements based on predicting an individual's fit to a specific sport and environment. Previous research has highlighted the integration of stakeholders and system as being a key feature of effective talent development. Yet, as regards selection, there has been little research exploring the influence of shared perceptions and values on selection. This paper explores these shared perceptions at the first stages of selection in a rugby union talent system. Specifically, using semi-structured interviews (n = 12) with stakeholders within a single region, this research looked to understand the level of integration between a regional 'Developing Player Program' and its feeder clubs and schools. Using reflexive thematic analysis, varying levels of integration between stakeholders were apparent, with stakeholders' views and beliefs influencing selection decisions. The findings suggest that at the earliest stages of talent systems, optimal practice requires an understanding of the purpose of selection and the overall system. This shared understanding is likely supported by a two-way interaction from both the top-down and bottom-up, with the aim of increasing integration across a large network of stakeholders.

Keywords: integration; selection; talent identification; talent development environment

1. Introduction

Coaches, at different levels of development, are typically responsible for the selection of athletes based on predicted future potential [1]. Coach judgements regarding the selection of athletes is the normative approach to talent selection in sport, defined as 'the ongoing process of identifying athletes at various stages of their training program' [2] (p. 1). Due to the complex, non-linear, and emergence of talent (e.g., [3]), there is a long-standing body of research suggesting talent systems should be based on understanding a player's potential for development, rather than being overly exclusive at an early age [4]. Consequently, one of the key challenges in talent systems is the separation of current performance from potential future performance, given the relative ease of understanding the former and the near impossibility of the long-term predictions related to the latter [4]. As a result of this, it is typical to observe biased selection samples. As an example, a bias favouring the selection of those born earlier in the selection year, the relative age effect (RAE; [5]), is prevalent across rugby union. As a separate phenomenon, adolescent players with an advanced biological maturation status relative to their peers are more likely to be selected for rugby talent systems [6] and also more likely to play the game at a recreational level [7]. Yet, at the senior professional level, these seeming early advantages appear to be mitigated when transitioning to the senior elite level, something referred to as the reversal

of the RAE advantage [8]. In an alternate setting, similar effects have been found in male ice hockey, with a greater likelihood of later maturers progressing to the elite level [9]. As a consequence, recent research has challenged the usefulness of blanket recommendations designed to mitigate against selection biases across talent systems, instead advocating for a deeper consideration of the dynamics of challenge at an individual/population level [10,11]. Significantly, such complexities add to the difficulties of prediction and selection as a whole.

By investigating vertical athlete pathway progression, several studies have explored how different bodies of knowledge influence the selection process (e.g., [12–14]). This involves understanding the purpose and desired outcomes of a talent system [15]. Without a clear understanding of the end goal, or the nature of desirable experiences for players along the journey, selection may prioritize current ability rather than future potential [16]. Furthermore, coaches' focus can vary based on short-term and long-term perspectives [4]. For example, Roberts et al. [14] suggested that coaches prioritize different traits depending on the perceived duration of athlete development. Short-term selection (e.g., to win the next tournament) tends to consider current performance, leading to the possibility of limited long-term potential. In comparison, longer-term selection looks for players with the potential for further improvement towards genuinely elite levels of performance [14].

In mitigation of these issues, an ongoing discussion in the literature concerns the proposed need for a shared definition and understanding of talent as a concept [14,17]. Some may view talent as a fixed capacity which can be identified early [17], while others may believe that talent is emergent and that early performances do not necessarily indicate long-term potential [15]. It has been suggested in the literature that stakeholders develop a shared understanding of these factors, using this knowledge to make informed selection decisions. This shared understanding of the purpose of selection is proposed to enhance overall system integration and effectiveness [11], with integration seen as the extent to which systems and stakeholders work in tandem to support a player's development vertically and horizontally [18]. The outcome of integration is coherence of experience for athletes, with Taylor and Collins [18] defining coherence as the extent to which different elements of a player's experiences across horizontal (i.e., level of performance) and vertical (i.e., longer term and between levels) environments are mutually reinforcing. Coherence has been demonstrated to be an important element of successful systems across several studies (e.g., [18–21]). Therefore, a lack of integration could lead to inappropriate judgments related to future potential. However, it is important to note that systems can be designed in ways that account for an acceptable error rate [17]. Subsequently, it is suggested that recruiters should consider a range of characteristics they feel are required for selection. In doing so, strike a balance in the criteria allowing for flexibility and adaptability, while promoting a coherent player development pathway [18]. This would seem especially important in systems that rely on the promotion of individual players by stakeholders, hereafter referred to as 'preparers', who are external to a specific talent development environment (TDE).

The nature of specific criteria would seem important in light of previous research [13,14] that has explored how tacit knowledge informs selection decisions. Aligned to the heuristics and biases tradition, previous research suggests a concern with this subjectivity, as it is prone to bias [17] and overconfidence on behalf of the decision maker [12]. As an individual's knowledge is socially and culturally constructed and shaped by an individual's prior learning and experience [22]. Furthermore, Cushion and Partington [22] note that individual perspectives can be subject to an ineffective reproduction of tradition, circumstance, and external authority, without empirical basis. Therefore, recruiters have an important role in sharing knowledge with preparers relevant to the socio-cultural landscape of the talent system, especially given the cultural nuances of each environment [19]. Consequently, a greater shared declarative and procedural knowledge base may support a selection decision process. Declarative (i.e., why to do something) and procedural (i.e., how to do something) knowledge can be developed through formal education activities

and informal learning through experience and engaging with others [23]. This shared knowledge, typically framed as shared mental models, has been shown to enhance collective decision making in selection [24].

Male English rugby union provides a unique case study to investigate this phenomenon (cf.25). The development of male players in English rugby union is facilitated through a joint strategy between the Rugby Football Union, the national governing body, and Premiership Rugby Ltd., the representative body for professional clubs. There are fourteen regional academies, with ten presently affiliated with Premiership clubs, charged with nurturing talent for both the Premiership as the senior club competition and the English national teams. In May 2013, the Rugby Football Union brought together some of the world's leading researchers to develop a consensus statement on talent identification and development. The output of that meeting concluded that "there is a consensus that ideally there should be no definitive selection–the logical consequence of talent identification– until after maturation" [26]. From a policy perspective, this led to the instantiation of England Rugby's 'Developing Player Programme' (DPP). Relatively uniquely across sport, this change in system design aimed to mitigate against the limitations of individual decision making and a small number of participants being selected before being subjected to further rounds of selection and deselection, often termed a 'pyramid approach' (cf. [27]). As such, the DPP was designed as a first selective environment, with the aim of 10% of the whole playing population being engaged [28]. Rather than being considered a part of the regional academy programme, the DPP acts as a supplement to school and club rugby and acts as a first step in the 'wide and emergent' English rugby talent system [21]. Rather than employing a specialized 'scouting network' as might be the case for some sports (e.g., [29]), initial selection for the DPP is conducted by 'preparer' coaches at schools and clubs [21]. Preparers nominate players to one of 14 regional academy programmes (the 'recruiters'). Within the DPP, the recruiters support preparers to identify appropriate player nominations. As such, integration in this context would see close working relationships between recruiters and preparers, both in their criteria for selection and their shared understanding of systemic goals [30]. However, Till et al. [21] note that this development of understanding may be hindered by the significant percentage of preparers who are volunteer coaches [31] and potentially lacking understanding of talent selection. With previously identified barriers including unclear definitions of talent and little evidence of effective means of talent identification [21]. Consequently, with research on talent development in rugby limited (cf. [32, 33]), selection for the DPP provides a relatively unique context to explore the impact of a system-wide intervention at the entry point to a 'wide and emergent' talent system. Furthermore, answering the call of McCauliffe et al. [34] for further exploration of selectors (i.e., preparers and recruiters) perceptions of selection. Therefore, the aim of the present study is to explore the level of integration between preparers and recruiters in a single English Rugby Union DPP, through the consideration of coaches' values and beliefs in making nomination decisions.

2. Materials and Methods

This study adopted a pragmatic research philosophy [35], supporting the use of methods which produce practically meaningful findings and implications [36]. Pragmatism offers a flexible and outcome-oriented approach to understanding, in this sense, diverging from positivist and constructivist positions by focusing on what works in practice and can be empirically justified, rather than adhering strictly to a particular set of ontological or epistemological assumptions [36]. Consequently, as a research team, we considered our role as supporting the active co-construction of knowledge with the participant(s) [35]. This process was facilitated by the first author's role in the DPP system as a coach and administrator, and the third and fourth authors' careers in rugby union talent development. Rather than being seen as risking bias, instead, this was considered a resource in the collection and analysis of data, due to our understanding of the wider context [37]. Without this insight, there is potential for a weakened theoretical sensitivity and reduced

quality of findings [37]. Reflecting this, qualitative research methods allowed for a deep exploration of practitioner's views, beliefs, and experiences of selection, developing an understanding of the lived experience [38].

2.1. Participants

The research utilized a criterion sampling approach, allowing for comparisons across participants [39]. This study focused on a single regional male rugby union academy context. All participants worked in the same region of England in a school (state or privately funded), club, or the regional academy. Due to the sample specificity (i.e., coaches who identify appropriate player nominations into a single regional DPP) and study aim (i.e., the exploration of views and beliefs), twelve participants (see Table 1) was deemed an appropriate sample based on the notion of information power [40]. Preparers were involved in selection decisions to the DPP U14 age group the following season and reflected the range of experiences of coaches within this context both through age (19–52 years) and coaching experience (1–22 years). This was deemed important, as it helped to capture a representative range of views and opinions. Furthermore, individuals who might be considered 'internal stakeholders', through affiliation with the DPP as coaches in the academy, as well as in clubs and schools, were excluded. The recruiters all worked full-time within the regional academy program.

Table 1. Description of study participants.

Participant	Environment	Age	Gender	Coaching Qualification
R1	Academy	34	Male	Level 3
R2	Academy	38	Male	Level 2
R3	Academy	44	Male	Level 2
C1	Club	46	Male	None
C2	Club	52	Male	Level 2
C3	Club	48	Male	Level 2
S1	School	31	Male	Level 2
S2	School	39	Male	Level 3
S3	School	32	Male	Level 2
S4	School	29	Male	Level 2
S5	School	39	Male	Level 3
S6	School	19	Male	Level 2

Ethical approval was obtained through the university institutional ethics committee, and participants were contacted via email informing them of the purpose of the study and inviting them to participate. Signed informed consent was provided prior to data collection.

2.2. Data Collection

In line with previous research exploring integration, a semi-structured interview guide with open-ended questions was chosen (cf. [23]). Such an approach has been shown to be versatile and flexible, allowing for follow up questions that allow the researcher to collect a rich understanding [41]. The interview guide was underpinned by current talent development literature and the research team's knowledge and experiences of the English rugby talent system. Questions were based on the purpose of the pathway, the definition of talent, the focus of player development, and selection criteria (see table 2).

The interview guide was piloted with two volunteer coaches who worked for the regional DPP, resulting in the modification of the language in certain questions, both for clarity and to better elicit relevant data. Interviews were conducted electronically via video interviews using Zoom video software (Zoom Video Communications – Version

5.15.2, San Jose, California, USA). The interview audio was recorded, and all interviews were transcribed verbatim.

Table 2. Interview questions.

Question	Rationale
What would you say the purpose of the developing player programme is?	Understand the perceptions of recruiters and preparers as to the purpose of the pathway.
Can you describe what talent means to you?	Understand perceptions of talent.
What does talent identification mean to you?	Understand the process of predicting the potential of individuals.
What do you think the academy are looking for in players at the DPP level?	Explore the criteria and philosophies that guide selection.
How well do you think the academy communicates with grassroots clubs and schools?	Explore and potentially enhance the understanding between recruiters and preparers

2.3. Data Analysis

A reflexive thematic analysis approach was used for data analysis, allowing for reflective and thoughtful engagement with both the data and the analytic process on behalf of the researcher [42]. The flexible nature of reflexive thematic analysis allows the researcher to conduct an in-depth exploration of participants' beliefs and take an active role in the production of knowledge [43]. Consequently, a mixture of inductive and deductive analysis was used, allowing for deep engagement with the data, whilst acknowledging the role of the researchers prior knowledge and contextual understanding [44]. The first stage of data analysis began with familiarization, involving re-reading the transcripts to gain familiarity with the data. Next, the data were coded, to organize the data meaningfully. Qualitative analysis software (QSR NVIVO-13 (2020, R1)) was used to structure, organize, and analyse raw data into thematic hierarchies, to link the data into categories of meaning. The themes were then reviewed against the research question, and those that helped to understand the research question were developed. Next, the themes were defined and named before being written up, using data extracts to develop a narrative.

The positionality of the research team can be seen as a grouping of insiders and outsiders [45]. The first author was an insider to the environment under investigation, as a member of staff at a regional academy and someone responsible for the operations of a DPP. The second author acted as an 'outsider' to rugby union, as a talent development coach in another sport. The third and fourth authors were not considered insiders to the environments of the participants but are experienced academy rugby union coaches, the latter being the strategic lead for Premiership Rugby's player development. To improve the trustworthiness of the data analysis, thick descriptions were given when exploring the themes discussed, to allow readers to transfer findings [46]. Markers for why decisions were made were evident throughout the research [47]. A reflexive journal was kept as a means of continual engagement with the data, considering the positionality of the research team and the context of data collection. It was also used as an audit of the overall study, especially when analysing the data, which also helped to relate and cross-reference the data [44].

3. Results

This section presents the key themes underpinning the examination of integration across a regional talent pathway in English rugby. Raw data quotations are used from exemplar participants to support and add clarity to the discussion (See Table 3). Throughout the presentation of results, specific sub-themes are presented in italics.

Table 3. An examination of integration at the entry point to the talent system.

Theme	Sub-themes	Exemplar Raw Data
Purpose and function	Identifying future elite players	"Find the next generation" (C1) "Develop future players for [club]" (R1) "Talent spotting for the professional game" (C2)
	Player development	"A higher standard of rugby" (S6) "You know the analogy big fish, small pond" (S2) "Expose players to a different type of coaching" (C3)
	Differential motives	"Get their own players into the environment so they can sing about it and show off a little bit" (R1) "As an institution we don't want that associated with us." (S3) "Players who've been with the team since they were 7 and think deserve a place" (C1)
Identifying who to nominate	Mixed perceptions of talent	"Actual performance or potential performance" (S2) "They have a natural ability" (C3) "A byproduct of gifts, genetics and experiences" (R3)
	Current skillset	"Straightaway he ticks all four boxes." (S3) "Physical attributes whether its speed, size or strength." (S5) "Reading the game is a bit of a unique talent" (C2)
	Perceptions of advantage and disadvantage	"A September, October, November birthday is a factor" (S5) "Different levels of physical development" (C3) "More exposure to rugby" (R1)
Selecting players	Highest current performers	"We want to nominate our best" (S3) "The ones that are performing well in games" (S1) "Obvious standouts, I'd be stupid if I didn't send them" (S4)
	Not just the best	"Come from a non-rugby playing background, but you can probably still express yourself" (R2) "A player that's just moved from overseas, never played rugby but has transferable skills" (S2) "Bring in those bigger players and teach them to play" (R3)
	Protection of self-efficacy	"It's tough for these lads who have developed slower" (S4) "They have more success when they get older" (S1) "Probably wasn't big enough to be in the DPP" (S6)
Understanding between recruiters and preparers	Communication between recruiters and preparers	"The relationships we have across the whole of the region with people who impact these players is pretty good" (R2) "There isn't a formal line of communication to support us" (C2) "I've always seen coaches from [club] regularly" (S4)
	Understanding of system	"We started noticing, "We can tweak this, this is what's coming from [club], this is what they're looking for." (S1) "Anything they can give us would be beneficial." (C1) "This is what we need to align with the club." (R3)
	Implementation challenges	"The points weren't memorable enough." (S6) "It's whether we think doing more will lead to better selection" (R2) "I don't feel like [club] don't try and influence in any way." (S5)

3.1. Purpose and Function

Participants acknowledged that they felt this selection point of the pathway served two purposes—*identifying future elite players* and *player development*—but was influenced by the *motives* of some preparers. However, for recruiters, there was a recognition that *identifying future elite players* was not possible at this early stage, with recruiters tying this into the academies' aim of producing senior players, but that this step allowed for engagement with a broader group: "there's a vision that 75% of the [senior] squad would be

home-grown, so this is the base of the pyramid, trying not to miss people" (R1). Yet, this theme illustrated a contradiction in understanding between the views of recruiters and some of the preparers. As such, some club and school coaches perceived a slightly different focus: "they're looking for talent who have the potential to go through to the pro game" (C3).

However, these differing perceptions were not just between recruiter and preparer. Some preparers were more closely integrated with the focus on the opportunity for *player development* over the performance that recruiters saw as important at this stage: "we're not really bothered about whether our teams do well. We want every individual to be in a better place" (R2). This attitude was reflected by one of the school coaches, "I'm not looking for them to go, 'right, you're going to make it as a professional rugby player', I think it's more of you're developing your skills" (S1), and also by C2: "boys that I've put forward for the DPP have developed some really strong technical and physical attributes that improve them". As a consequence, S2 identified the developmental benefits for nominated players: "people might not be getting challenged enough at school because the other players aren't good enough to provide that player that challenge. So, by that player being sent to DPP they're getting that stretch". This was supported by C3: "boys get to play with others at the same level, and being in that completely different environment is good because it's stretching for them". This development was seen to impact on the club and school environments that individuals continue to play in: "It's also got to raise the standard of everything else in the area, otherwise it's not serving its' purpose to the wider game. If the aim of the DDP is that we have five players from a grassroots club, they should go back to their club and they should raise the standard of their teammates. And then those lads that haven't got there see these lads doing things that they want to be able to do, which should drive everyone on to train harder" (R3).

Despite these perspectives, it also seemed that nomination for this early stage was also based on factors irrelevant to perceptions of 'talent'. Recruiters expressed a belief that preparers may nominate players based on differential *motives*, using it to promote their own environments: "some places will just nominate their best players to show how good their program is" (R3). The strategic use of nominations to promote or maintain the external perception of a school was noted by S5: "the more people we have involved with it, the better it is for [school] as well. We can promote that on our social media". Nominations were also used as motivational tools within preparer environments as reward for good behaviour, "you're going to the DPP, you should be having this sort of standard about yourself" (S1), and to prevent dissatisfaction among players: "nominating players who haven't previously been nominated and feel they deserve a chance" (C1).

3.2. Identifying Who to Nominate

Participants held a range of views related to the expression of 'talent' and how it might impact the nomination process. In this sense, preparers and recruiters reflected views related to the term 'talent' that were relatively coherent with the overall literature, some more closely aligned to the work of Gagné [48]; "I think talent is a byproduct of the gifts, genetically moulded, and the experiences you've had" (R3), and "there must be some raw material; skills can certainly be learned and developed." (S2).

There was also a perception of the more *emergent factors* of talent contributing to the challenges faced by preparers when nominating: "slower maturing players may find it difficult to show their talents" (R2), and "keeping tabs on lads that you think have potential but aren't quite there yet." (S6). This was also influenced by individuals' understanding of the relative advantages and disadvantages influencing player development. R3 broadly suggested: "how much exposure to sport have they had? Are they early or late maturing, have they gone through PHV (Peak Height Velocity)". Furthermore, preparers demonstrated different views and beliefs regarding factors that influence talent and selection. Most of the preparers recognized the advantages of early biological maturation: "the physical discrepancies at that age. It can be almost grown men versus children" (S4). The

quality of coaching received was also highlighted: "it's hit and miss across the quality of coaching you receive at grassroots level" (C2). Yet, despite this relative understanding of theory, there appeared to be significant oversimplifications in the understanding of other factors. As an example, relative age was perceived to be a driver of physical advantage: "having that early birthday is a big factor because you are going to be bigger and faster, generally, than later birthdays" (S5). Similarly, in practice, most participants seemed to judge talent as an observable feature of current performance, or a "standout feature" (S5) compared to peers. This was both perceived by recruiters—"do they have potential abilities which can be moulded?" (R2)—and preparers: "they may not have the full package, but you can see it's there" (C1).

3.3. Selecting Players

As such, despite some relatively nuanced reasons being given to underpin their decisions, these were not necessarily reflected in the actual process of nomination. For the preparers, there were a wide range of theories in use regarding which players to nominate and their characteristics. Participants reflected on nominating the *highest current performers*, for example: "whoever the best five players are, put them into the system. If [club] decide they're not for them, that's fine. At least I've just nominated my five best players" (S5). R1 suggested "people tend to send the best players in their environment because they only see what they see". Furthermore, S5 said "[send] your best players now, don't negate them because the best player is the best player", with R2 noting: "who are we to say they shouldn't put them through if they're a high achiever in their environment?"

For other preparers, there appeared to be a greater integration of knowledge with the regional academy, understanding the desire for '*not just the best players*' to be nominated. R1 suggested that: "you've got to look at who's 2, 3, 4 and 5, to push the best, with the aim of making them the new 1, 2 and 3" (R3). Some preparers coaching at clubs took a broader view and considered players outside of the "best": "look outside of the top try scorer, the strongest number eight, or the strongest prop. You just look within your squad to see who's got it" (C1). In addition, S4 suggested: "long-term development is probably more of what we want to aim for. Who's going to be the best rugby player at 18, 20, 25, it's that long game".

The longer-term focus of the academy was mitigated in part by the judgment and values of preparers that the first selective environment would not cater to those of a lower current ability but with a perceived high potential. As such, preparers based their nominations on the *protection of self-efficacy*. For example, S5 commented on a hesitancy to nominate players new to the game: "he might not get nominated because he's new, I don't want to nominate him, and then him become a flop". Similarly, there was hesitancy to nominate less biologically mature players: "there were players we wanted to nominate who physically just weren't there... they would have had great potential, but we couldn't select them because it wasn't fair to them" (C2).

In terms of the *current skillset* perceived as necessary, all participants felt that talent could be observed across several different aspects of the game. Recruiters reflected on a shared framework: "[Model] is about the attacking, defensive, athletic and teamwork skills and how they interact to produce a well-rounded player" (R1). This framework appeared to be understood by some preparers: "we used [model] when looking at players and if they had at least half of the attributes that we'd say: 'they're good at this, they meet the criteria'" (C3), and "when I'm nominating players, I know what [club] look for, then I can look out for that" (S3). However, other preparers dismissed the use of the framework—"I don't feel like it applies when you're nominating" (S5)—highlighting the potential for divergent values and beliefs to influence nominations.

Physical attributes were perceived by many to indicate significant potential: "they could have never played rugby before, but they have raw physical attributes" (S2). In contrast, others emphasized that these characteristics must be supported by skill: "size, as well as playing ability, is important" (C2). Others dismissed physical aspects entirely:

"base it on skillset rather than how big they are" (S6). Recruiters perceived a more nuanced view that acknowledged the differential positional needs of rugby union: "they can be talented athletes, but not a rugby player. Ideally, I'd want someone who can control their body, can catch, and pass off both hands, understands where space is on a pitch, step off both feet and can run in a straight line without falling over. A lot of what we talk about is having points of difference. You need big, tall people. Someone who can sprint 100m in 10.6 seconds, can you afford not to have them in your pathway?" (R3).

There was a universal perception that psycho-behavioural skills were critical for success: "lads determined to get to every training session and work hard" (S1), and "you've got to be sure that a player you put forward is strong mentally, understands that they may not be kept" (C1). However, recruiters suggested players will develop skills as they mature: "they are very malleable, and lads still have loads of learning and growing. You wouldn't identify and prioritize someone on their psychological aspects" (R2).

3.4. Understanding between Recruiters and Preparers

When exploring the understanding between recruiters and preparers, the *communication between recruiters and preparers* and *understanding of the pathway* and *implementation challenges* were all discussed. Firstly, there was a significant discrepancy in how the level of *communication* was viewed by different stakeholders. Recruiters noted that they produced a lot of content delivered to preparers by email and social media: "the club has created documents, worksheets and short videos" (R2). Some preparers found them useful: "everything is accessible. It clears everything up" (S3). However, some preparers referred to the difficulties in one-way communication: "there was a presentation emailed out to clubs, and we read through it and worked out the sort of the wording between the lines and made our selections" (C2). In addition, some preparers discussed informal communication channels: "chatting to coaches from [club] via text and e-mail has helped me understand it" (S4), and "[club] kind of suggested using the model, but it was conversations with [academy coach] who plays at our club over a beer in the clubhouse. He talked us through the things that they're looking at this year" (C3). However, other club coaches perceived a lack of communication between themselves and recruiters: "at a personal level I've not had any direct communication" (C1). C2 expanded on this: "there needs to be more of a focus on supporting grassroots rugby. I think [academy] needs to have a stronger eye on the implications for grassroots rugby." R1 acknowledged this: "we're touching base in multiple different ways. We probably could do more of it. It's hard, isn't it? To go out and speak to all these individuals, we'd have to have hundreds of communication lines, so it's probably not the best use of time." R2 reflected on the difficulty of action, demonstrating the complexity of the talent system: "you can't speak to everybody in a deep way because there's just too many people, but you can ensure you have certain people that you have deeper conversations with, to essentially quality assure your process."

An *understanding of the system* was developed through preparers engaging with the club on social media: "graphic [academy] released on social media showing how the pathway is" (S3). It was this ongoing interaction and social learning that seemed the predominant source of information that preparers used to further their understanding of the talent system: "I ask the lads, "what feedback did you get from [academy]?" Because if that's what they're looking for, that's what we can start implementing across the board" (S1). It was also acknowledged that this understanding evolved over time: "I think if a coach has been involved in successive years, they'll have a better understanding of what to look for" (C1).

Recruiters referred to formal engagement: "we have to model those ideas, so coaches from grassroots clubs come in, understand what we are doing and take them back to their clubs" (R3). Many of the preparers acknowledged the value of these: "[Academy] offer community nights where we go in and watch some coaching and you learn what to look for" (S4). However, some coaches seemed unaware of these sessions and wanted to engage

in more recruiter-led sessions: "even a webinar, where we could understand what is required, it would be better than where we are at the moment" (C2).

Participants also referred to *implementation challenges* in developing a shared understanding; some preparers commented that there was limited, guidance from recruiters: "there's no real direction from [academy] of what they want" (S5). Reflective of some preparers desiring a level of simplicity, a school coach suggested (S1): "ideally, I would like to see a little bit more. So broad topic, but then key bullet points. So broader topic of we're looking for good defenders, but these are our non-negotiables If there's non negotiables, you're using that as a tick box."

Finally, participants demonstrated the challenges of integration between preparers and recruiters. Some preparers suggested they were not aware of or could not remember the model: "it's not something I've been aware of" (C1), "I can't remember for the life of me what the words were" (S1), and "I couldn't tell you what the phrases were, they weren't memorable enough" (S6). However, recruiters were hesitant to offer explicit guidelines, as it might give "them a little more scope for misunderstanding and misapplying" (R1), and: "it's whether we think doing more will lead to better selection or would you end up with the same people" (R2). Recruiters also expressed a concern that preparers may choose not to acknowledge any shared understanding: "people who won't jump on board and interpret that or they'll interpret what we put out there how they want to" (R2). One school coach demonstrated this concern: "as a coach that has done it for a long time, I'm not really that fussed. I've got my opinion on how it should be done" (S5).

4. Discussion

The aim of this paper was to explore the integration of preparers and recruiters at the first selective environment of the English rugby union talent system. Consequently, this study investigated a relatively unique context in talent systems (cf. [21]). With the instantiation of the DPP from 2013, taking account of long-standing research (e.g., [49]), England Rugby initiated policies designed to provide development to 'as many as possible, for as long as possible' [50]. Our findings suggest several contextual factors that influenced the perceptions of actors in the wider system of development. Firstly, whilst the limitations of using 'one-off' assessments in the form of scouting are well acknowledged, the differential approach deployed in male English Rugby Union encouraged the use of 'preparers' to nominate players for the talent system. This was designed to allow for a more equitable approach to selection. Yet, this was mitigated by a level of confusion amongst stakeholders regarding the purpose and function of the stage of the talent system they were nominating for. Some recruiters perceived nominations as needing to identify future elites and players that present early markers of performance. This contrasted with others who better understood the purpose and function of this stage of the talent system, as capturing a large number of players as an opportunity for a small amount of additional coaching. That, in essence, the DPP was there to develop a large player pool, to minimize the potential deselection of future performers [51] and those who might experience early relative disadvantage [10]. Although attached to an academy program, this stage of the pathway is framed as an opportunity for development, defined as 'a multi-faceted process of optimally nurturing athletes over time within a sport-system' [52] (p. 8) rather than talent identification. In short, as a first selective environment the DPP represents a longer-term approach to monitoring development, rather than a one-off identification of talent.

Secondly, it is apparent that within the system implemented here, individual coaches' axiological views appeared to challenge the opportunity for effective integration regarding selection decisions. Axiology refers to the values a coach holds regarding their practice (cf. [22]). In this case, it was apparent that coaches held differing beliefs over the weighting of factors when identifying appropriate nominations. For example, preparers in this study referred to the importance, and impact, of birthdate (i.e., RAE) (e.g., [5]) and maturation (e.g., [6]) when identifying who to nominate, in a manner aligning to a more naïve application (i.e., the knowledge is simple, clear, and specific) [53]. It was suggested

that players born in quartile 1 would have a significant advantage over later-born players. However, a coach with a more sophisticated application (i.e., knowledge is complex, uncertain, and tentative) [53] would be more considerate of the need to avoid blanket considerations against birthdate at the risk of excluding players based on birthdate (cf. [10]).

Further evidence of axiological considerations included the acknowledgement that some preparers discount physical characteristics in favour of current technical and tactical performance, and others would not select based on a heavy weighting towards psychological skillsets. However, the literature would point to the need to acknowledge the usefulness of appropriate physical considerations (e.g., [54]) and the importance of psychological skills in the development of superior performance on the pitch (e.g., [55]). Consequently, there are opportunities for systems to support coaches to develop a greater understanding of their axiological positions through bringing attention to what matters to these coaches [56]. For example, the academy could provide forums for club and school coaches to come together to recognize, and positively challenge, individual beliefs, biases, and assumptions, without judgement regarding 'best practice' (cf. [57]). Such an approach has the potential to provide insight into the varying types of knowledge coaches have been exposed to and their priorities in practice [1,58].

Finally, our findings point to the complexities of operationalizing strategy in the talent system, highlighting barriers to shared understanding, with nominations taking place across multiple settings [30,59]. In this sense, whilst some nominators were clearly integrated with the needs of the recruiters and broader talent system, with many articulating relatively sophisticated notions of talent, other preparers desired and held more simplistic conceptions of talent and, in some cases, over simplistic guidelines for promoting players. Whilst our data are limited to a single regional academy, these differential conceptions may act as bottom-up barriers to effective practice, mitigating top-down system policy (cf. [30]). This way, practitioners on the ground see themselves as deliverers of strategy [60]. This can be referred to as a complexity-absorbing approach to decision making [61], simplifying information and minimizing connections between the bottom and the top to one-way communications [62]. Unfortunately, such an approach tends to lead to practitioners using information from the top selectively to reinforce their nominations, leading to a disparity between 'what should be' and 'what is' nominated [61]. However, the talent system in this study is a complex network of interacting agents; therefore, the overall pattern of behaviour is likely to be adaptive, and emergent [63]. Consequently, a complexity-adapting approach to decision making would be more advantageous [61], recognizing the need for the integration of bottom-up and top-down functions through feedback loops and communication channels [30]. Adopting such an approach recognizes multiple, and sometimes emerging, goals and emphasizes the importance of bi-directional connections among the parts of the organization (i.e., preparers and recruiters) [62]. Furthermore, this can help acknowledge and resolve the conflictual issues that can arise when discussing who to nominate and why (cf. [62]). From a practical perspective, it is for this reason that changes to the male English Rugby Union talent system have now encouraged the delaying of selection to 15 years of age and reflective of the differential purpose of these first selective environments, they have been labelled as the 'Foundation phase'.

The current research explores the experiences of 12 individuals within one of 14 first selective environments in male English rugby union. In this sense, we encourage the reader to consider transferability, rather than universal generalizability across alternate talent systems [64]. Such considerations would help understand the difficulties in supporting nominations across systems, highlighting chronic (i.e., aspects that all selection processes require) and acute (e.g., geographic or population size) considerations.

5. Conclusions

In conclusion, this study provides insights for practitioners operating across talent systems (from coaches to talent system operators/designers), highlighting the need to consider practitioner values and beliefs regarding talent and the purpose of a talent system,

with the aim of developing more integrated approaches to nomination and selection. Importantly though, we stress the challenges of presenting generalized guidance in this space, due to the likely influence of geographic location and individual coach knowledge and experience on the study findings. Consequently, these challenges point to the need for talent research to consider the context in which selection and development is situated. To our knowledge, this paper is the first to consider the relative dilemmas of practice at a first selective environment, in this instance using the male English Rugby Union system as a relatively unique context. Although the central premise of talent systems is to identify and select the most promising players with the potential to excel and achieve professional status (cf. [65]), there is a need to acknowledge the stage of a player's pathway where selection is situated and the context of the system (cf. [66]). In this case, the DPP is ideally recruiting 'above average' players into an U14 age group through the nominations of a range of preparers. This approach should focus on a holistic and inclusive development, through providing more players greater access to higher-level coaching and appropriate development environments [51]. To do this, complex talent system would benefit from two-way interactions engaging both top-down policy makers and recruiters and bottom-up preparers.

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