

Talking a Good Game: Identifying the Discrepancies in Football Coaches' Beliefs and Actions in Player Selection

Rich J. Kite^{1,3}, Michael Ashford^{2,4}, Mark R. Noon^{1,2}, Rhys Morris², and Neil D. Clarke⁵

¹Centre for Sport, Exercise and Life Sciences, Coventry University, UK

²Faculty of Health and Life Sciences, Coventry University, UK

³Academy Sports Science and Medical Department, Coventry City Football Club, UK

⁴Grey Matters Performance Ltd UK, UK

⁵College of Life Sciences, Birmingham City University, UK

Correspondence: Rich J. Kite, kiter@uni.coventry.ac.uk

Abstract

Coach intuition plays a critical role in the selection of academy players. A coach's beliefs about a player's current abilities and perceived potential are critical in deciding a player's future. Therefore, this study attempted to gain insight towards each coach's experience and beliefs in selecting players, before undertaking a hypothetical selection activity to understand whether coaches act on such knowledge. Twenty-four coaches recruited from 21 unique professional football (soccer) academies (nine Category 1, eight Category 2, and seven Category 3) took part in semi-structured interviews. The findings established that coach beliefs and actions differed, whereby coaches stated a wide range of holistic beliefs towards selection, yet the hypothetical scenario outlined a far narrower selection criteria applied in action. While several beliefs were reinforced, it was also clear that biases were also presented. Maturation-related bias, favoring the more mature players, explained a potential focus on specific physical qualities (speed) and the perceived potential of players. Additionally, a focus on current performance, over wider elements related to perceived future potential, was evident during the selection scenario. Moreover, while subjective input will remain a key contributor to the player selection process, objective assessments and the input of wider multidisciplinary staff should be utilized to help mitigate the above-mentioned issues.

Keywords

maturation, subjective assessment, soccer, espoused theory, player selection

Introduction

Player selection within English academy football is a reoccurring process throughout the development pathway and aligned to critical ages. Within the English professional football academy system, due to the implementation of

the elite player performance plan (Premier League, 2011), three phases of player development exist: foundation phase (under-9 to under-11), youth phase (under-12 to under-16) and professional phase (under-17 to under-23). When players reach a transition in phases (and sometimes within phases, notably the mid-youth

and professional phases) a selection process is typically undertaken, establishing the retention or release of players for the following season. Such processes are important to undertake. In addition, throughout a season, new players will be introduced into the squad, some of which will be retained for the remainder of that season (Hill & Sotiriadou, 2016). Subsequently, an end of season reduction in squad size may be required to enhance management by the coach. Likewise, currently contracted players may no longer be perceived as future talents and/or be underperforming to the expected standard. Removal of these players may be essential to ensure they do not “block” competing players with greater perceived potential for future success. Moreover, the selection process not only serves to remove barriers to talent development, but also ensures that a squad size is manageable (relative to each club) given the resource restraints each club will endure (Sieghartsleitner et al., 2013).

Player selection typically comprises assessing and comparing player abilities and considering development of such qualities over time. Determining player ability utilizes various assessment procedures, usually including objective (i.e., components of fitness assessments) (Dugdale et al., 2021; Sieghartsleitner et al., 2019) and subjective (i.e., coach intuition) processes. However, while much research has sought to understand what distinguishes talent through both objective and subjective assessments, the utility of such methods have been brought into question. Considering objective testing, problems have been associated with the lack of consensus for attributes holding high predictability of talent in football (Hill & Sotiriadou, 2016) with inconsistencies demonstrated across research. For example, conflicting findings have been established in anthropometry (Lago-Peñas et al., 2014; Mirkov et al., 2010) and change of direction (Dugdale et al., 2020; Reilly et al., 2000) among other assessments and variables. While this may be due to the varying tactical approaches of individual clubs, such inconsistencies in findings highlight why objectivity alone is potentially unreliable.

Moreover, there is a need for wider input (i.e., subjective assessments) to enhance the selection process.

Subjective assessments apply coach experience, knowledge, and expertise at the forefront of decision making. Research investigating coach decisions has identified constructs such as “nested” thinking, a process that encapsulates the use of fast intuitive and slow deliberate decision making processes (Abraham & Collins, 2011; Collins et al., 2022). The use of “intuition,” whereby a subjective belief of a player’s ability is based on experience, knowledge and a “gut feeling” or “inner sense” (Lath et al., 2021; A. Roberts et al., 2021), is commonplace within the player selection processes (Christensen, 2009; A. Roberts et al., 2021; Sieghartsleitner et al., 2019; Towlson et al., 2019). Research investigating coaches’ perceptions of attributes deemed important for future success (attaining a professional contract) established consensus as most essential qualities in psychological, technical, and tactical abilities, with physical abilities appearing least important (Kite et al., 2022; Larkin et al., 2017; Roberts et al., 2019). Each research design used a Delphi model; however, while Larkin et al. (2017) and Kite et al. (2022) followed similar processes establishing general beliefs towards outfield players, Roberts et al. (2019) distinguished perceptions by position. Consistency was established across all research in finding decision-making skills as one of the highest perceived attributes, although positional variation was noted by Roberts et al. (2019). It is important to note that while physical abilities were considered least important compared to other attributes, they were still acknowledged as necessary areas of development.

Conversely, while subjective inputs have been reported as a reliable method of player selection (Sieghartsleitner et al., 2013, 2019), such practice has also been aligned with unique flaws, namely (sub)conscious selection bias. Examples of subjective bias have been reported in emphasizing physical profile (i.e., racial stereotyping and height-based bias) (Furley & Memmert, 2016; Stone et al., 1994), early

maturation bias (Cripps et al., 2016; Meylan et al., 2010) and birth date bias (Deprez et al., 2013; McCarthy & Collins, 2014). A false perception of potential has been linked to height and maturation bias, whereby players of advanced maturation (having entered the growth spurt earlier) are relatively taller than their less mature peers (Cripps et al., 2016; Furley & Memmert, 2016). Likewise, there is a birthdate bias; that is, players born earlier in the sporting calendar are perceived as being more likely to succeed (Deprez et al., 2013; McCarthy & Collins, 2014). In light of such issues, it has been established that the collaboration of subjective and objective assessments best enhances selection outcomes and arguably counteracts each method's downfalls (Kite et al., 2023; Sieghartsleitner et al., 2019).

A wider consideration related to the use of subjective inputs is whether coaches truly act on their beliefs and philosophies within practice. Research investigating football coaches' awareness in applying their beliefs within practice found that coaches were able to identify key concepts but were unable to rationalize them (Duggan et al., 2021). The same study also sought to understand if coaches' philosophies aligned with their practice and reported a general lack of understanding from coaches as to what a philosophy truly is (Duggan et al., 2021). A similar study investigating elite football coaches found that coaches had poor self-awareness of their beliefs and actions, likewise being unable to understand their own practice fully (Partington & Cushion, 2013). This may be due to coaches developing their beliefs based on prior experiences, which results in a disparity between their beliefs and their current club's philosophy (Hill & Sotiriadou, 2016). Moreover, the above issues are likely to extend into wider contexts, such as player selection. Coaches will hold beliefs and, in part, a philosophy for player selection (which may not align with current procedures). Ultimately, investigating whether coach beliefs and philosophies towards player selection are ultimately acted on may provide meaningful information for academies and their selection process.

Given the issues and considerations raised above, the purpose of the present study is to understand whether coaches act on beliefs about their philosophy when undertaking a player selection scenario. This insight will be achieved by undertaking a two-stage interview: first acquiring information about coaches' beliefs and philosophical stances and then undertaking a hypothetical selection scenario along with follow-up questions inquiring how such selection decisions were determined. As a by-product of inquiring about each coach's beliefs and philosophies, additional insight will be gained towards the attributes coaches perceive as important for subsequent success in football.

Methods

Research Design

As authors, we adopted a pragmatic research approach (Morgan, 2014) to offer findings that were embedded in coaches' beliefs regarding current practice within professional football academies. Pragmatism identifies "real world" problems in order to provide clarity about future solutions that have practical utility (Campos, 2017; Morgan, 2014). Therefore, methods were considered and applied based on their usefulness in providing data which best served the study purpose and research aims. The aim was to produce data that might be used to uncover critical information regarding football player selection processes that are applicable and highly relevant for personnel working within this context.

Semi-structured interviews were chosen for this study, as they provide participants opportunity for constraint-free conversation that results in richly detailed responses. Semi-structured interviews also enhance the richness of outcomes by permitting the interviewer to detour from the structured questions and further interrogate responses for enhanced clarity, aiding the richness of outcomes. The study followed the consolidated criteria for reporting qualitative research checklist (COREQ) to enhance the transparency of the research. Institutional ethical approval was obtained prior to any investigations.

Participants

Purposeful sampling was employed to recruit coaches within English professional football academies recognized by the governing body. The participants ($n = 24$) (Table 1) were recruited from UK football academies ranging from Category 1 (top-tier academies), Category 2 (second-tier

academies), and Category 3 (entry-level academies) (Football Association, 2014; Premier League, 2011). The participants consisted of Lead Coaches ($n = 22$) and Academy Head of Coaching ($n = 2$). Data collection occurred towards the end of the 2020/21 season (January–April), in line with typical academy selection periods.

Table 1. Participant information organized by academy category status

Academy Status	Unique Clubs	Participants	Coaching Experience ($M \pm SD$)	Years at Current Club ($M \pm SD$)
Category 1	8	9	12.3 \pm 3.8yrs	4.2 \pm 3.0yrs
Category 2	7	8	12.5 \pm 1.9yrs	3.3 \pm 1.9yrs
Category 3	6	7	14.4 \pm 5.1yrs	2.5 \pm 1.3yrs
Combined	21	24	13.0 \pm 3.7yrs	3.4 \pm 2.3yrs

Procedure

Semi-structured interviews were used providing consistency in questioning, while permitting variations in phrasing to improve the flow of the interview. Additionally, probing questions (such as “can you elaborate on what you mean?”) were used to attain greater depth and clarity in responses in the event of ambiguity, deciphering key terminology or gaining a greater understanding of the response. Open-ended questions formed the main elements of the interview guide, focusing on three main themes: (1) what attributes are related to talented players, (2) what strategies are employed for retaining or releasing players, and (3) do coaches' beliefs align with their actions within player selection.

To attain insights into these themes, the interviews consisted of three sections: (1) background information, (2) an investigation of personal beliefs and biases surrounding player developments and selection processes, and (3) an in-action selection activity. The selection activity required that, ahead of the interview, coaches prepare a team sheet of the players/age group they work with (instructions were sent out prior to interviews). To maintain the anonymity of the players, team sheets were numbered, and players were referred to by their corresponding number. Further utilizing the team sheet, coaches were asked to group players into higher-, medium- and

lower-performing groups, marking corresponding letters (H, M, or L) next to each player (for coaches to refer to during further questioning). Once the coach had determined such groupings, further inquiry sought to understand the process for grouping players, recognize alignment of retention or release of players being grouped, and determine if the coach's beliefs (previously identified) aligned with their selection rationale.

The interview guide was submitted to a research expert who provided feedback, with follow-up amendments applied. Additionally, a practice interview preceded formal data collection to determine potential design flaws within the interview questions and allow for required changes, whereby further minor adjustments were made. Formal participant interviews ($n = 24$) were undertaken and recorded online using Microsoft Teams. Interviews lasted between 41 to 124 mins ($M = 69$; $SD = 18$ mins) utilizing the same researcher throughout. A research expert had provided the primary researcher with informal training in hosting interviews, with additional feedback provided from observations of the pilot study. Furthermore, the primary researcher has extensive experience within the subject area, holding a master's degree in research, has several publications around athlete development and selection protocols, and has a decade of experience working within professional sport (3 years within a professional football academy). Of the 24

participants, the primary researcher had a professional history with 2 of the participants. Both participants were offered, but declined, an alternative interviewer to avoid any restrictions in responses due to such relationships. All other participants were informed of the researcher's current position within an academy but were reassured that the information provided would remain confidential and anonymous.

Data Analysis

Following the guidelines provided by Braun and Clarke (Braun & Clarke, 2006; Clarke & Braun, 2017) and Nowell et al. (2017) the first author initially became familiar with the transcriptions by reading and re-reading them (taking notes of potential codes and themes) before coding with qualitative software (QSR, NVivo 12). A reflexive approach to thematic analysis was undertaken to establish codes from the data, further grouped accordingly into themes, providing a hierarchical table of data (Braun & Clarke, 2019, 2021). The first author followed each of the six phases initially outlined by Braun and Clarke. Importantly, this occurred in a fluid fashion, with appropriate non-linear movement between phases. To start, the first author became familiar with the content, highlighting and noting areas of interest. Second, surface-level coding was conducted, before raising the assumptions which underpin our meaning through multiple sweeps of analysis. Third, themes of meaning were identified, organized, and defined from the initial coding process. At the fourth stage, the second author, acting as a critical friend, examined and supported the review and refinement of themes to quality-check if they were "coherent, consistent and distinctive" (Braun & Clarke, 2021). Penultimately, the fifth phase included a process of defining and naming each theme based on the attribution of shared meaning from the data, theory and shared views of the authors. The final stage was the write-up and report of data. Themes were then arranged alongside representative quotes to demonstrate the narrative and context of each theme.

Trustworthiness

To enhance the trustworthiness of the data, data triangulation was implemented within the interviews comprising three sections (Tracy & Hinrichs, 2017). The first section acquired general participant information (perceived beliefs), while the second and third sections sought to answer the same line of questioning through different methods of inquiry (applied beliefs utilizing a hypothetical selection activity). This clarified answers through understanding a coach's perceived beliefs about player selection and then assessing the in-action application of such beliefs, aligning to the concepts of espoused theories and theories in-use within critical reflection (Jones, 2009; Lundberg et al., 1975). Therefore, thematic analysis was undertaken for the entirety of the piece (Table 2) developing a coding frame. A further isolated thematic analysis was then undertaken on the selection activity outcomes, applying the initial coding frame, to determine possible differences in perceived beliefs and beliefs in action (creating the "action & belief" column within Table 2).

Additionally, the credibility of the data was further enhanced through peer debriefing (Nowell et al., 2017) and member reflections (Tracy & Hinrichs, 2017). Peer debriefing is the utilization of an external peer to confirm the "fit" between participant response and the researcher's interpretation. Member reflections were determined as the tabulated data (Table 2) were submitted back to participants, followed by short interviews to determine member feedback on the research outcomes (Tracy & Hinrichs, 2017). Of the 24 invited participants, 7 participants agreed to undergo member reflections. There was consensus among those participants that the outcomes represented their own beliefs towards player developments and processes. However, a repetitious response from the coaches was noted: The outcomes of this research may summarize a perceived set of beliefs and values, while within practice this will likely differ due to the internal dynamics of each academy and subconscious biases. The following quote provides an example response: "I think [the thematic analysis outcomes] reflect well on coach beliefs, but, not necessarily their actions."

Table 2. Thematic outcomes comparing beliefs and actions in player selection.

Main theme	Higher-order themes	Lower-order themes	Excerpt	Belief / Action
4-Corner Model	Psychological Skills	Behavioral Skills	<i>“There are two areas, I think, that you cannot play professional football at the top level if you haven’t got. I think it’s enthusiasm, curiosity. So, attitude. Doesn’t mean that you have the best character in the world, but it means you’ve got incredible drive and you’re resilient.”</i>	Belief & Action
		Resilience	<i>“You can have as much ability as you like, but unless you can deal with what football throws at you in terms of that psych and social corners, then the likelihood is you’re not gonna get... you are only going so far up the ladder, you’re not going to get past the next step.”</i>	Belief & Action
	Tactical Skills	Game Understanding	<i>“Yeah, I believe that, you know, top-level players have just got a better understanding and awareness and decision-making at optimal speed under pressure than the average players who don’t see the pictures.”</i>	Belief & Action
		Tactical Competency	<i>“So, for me, the best players are able to assess and see what’s around him, at like Quick split-second speed, make the best decision and assess it and then also execute the quality of it to make sure that it’s effective, and not just they see it, but they can’t execute it. And the top players were able to do that consistently.”</i>	Belief & Action
	Technical Abilities	Technical Competency	<i>“Because they’re in an academy they should be good at dribbling, good at passing, good at defending, good at heading.”</i>	Belief & Action
	Physical Abilities	General Physical Abilities	<i>“Yeah, but I would say the physical side is definitely probably the most determining factor.”</i>	Belief & Action
Specific Physical Abilities		<i>“Yeah, the player has got exceptional physical abilities, he’s got exceptional pace and he’s a great ball striker.”</i>	Belief & Action	

Note. Belief = The coach demonstrated a belief toward this theme as a determining factor of player selection. Action = The coach acted on this theme within the hypothetical scenario as a method to distinguish player selection, but no prior beliefs of such theme have been identified. Belief and Action = The coach highlighted a belief of this theme as a distinguishing factor of player selection, and this was acted on during the hypothetical scenario. (Table continued on next two pages.)

Main theme	Higher-order themes	Lower-order themes	Excerpt	Belief / Action
		Maturation	<i>“Again, the maturity of the body will come within different groups of ages. You will have people that have grown. In that year and you will have people that are still growing. So, if you are taking a decision when they are 10, 12, 14, on how they are you physically in physical aspects, you can be wrong because the player in half a year could change completely.”</i>	Belief
Player Assessments	Objective Assessments	Benchmarking	<i>“You’re looking at comparisons from players that have previously been in a similar situation, maybe five, six years ago, or current first-team players, you look at their data from where they were the same age, and they might be of similar physical stature for example”</i>	Belief
		Allometric Scaling	<i>“Yeah, so there might be some boys who may score lower on the physical testing data, but the opportunity to compare them to other boys who are, uh, of a similar biological age, as opposed to a similar chronological age, it’s able to give you a greater perspective on perhaps where they really stand amongst their peers.”</i>	Belief
		Holistic Assessments	<i>“And then we sort of really, by the end of it, we’ve kind of got an idea on profiling as to what that player is likely to be, based on their physical output, their technical and tactical output, and their sort of psychological profile as well.”</i>	Belief
	Subjective Assessments	Perceptions of Abilities	<i>“We look at we look at their ability, their potential we’re looking at their skillset and we’re judging against what we deem the standard and against our boys. Simple as that.”</i>	Belief & Action
		Predicted Potential	<i>“So what my next thing would be, if I was to do this, you know doing this myself, I would then start looking at their potential. So, he may be a higher performer but a really low potential”</i>	Action

Main theme	Higher-order themes	Lower-order themes	Excerpt	Belief / Action
		Outstanding Abilities	<i>"[What tells apart the top performers from the rest is] their strengths. like I said earlier, their outstanding strengths."</i>	Belief & Action
		Giftedness	<i>"But there's also one or two in that group that are very different, that's not ... that's not something I would describe them as, they're just very gifted."</i>	Belief & Action
	Performance Grading	Current Performance Standard	<i>"[Players were determined] subjective really, in regards to performance levels across the season."</i>	Action
		Consistency in Performance	<i>"Whether they're high performers to low performances, it's their consistency of their performance"</i>	Action
		Expectations in Performance	<i>"He just hasn't performed to the level in comparison to the ones above him, that we are expecting, that is the level required to be a scholar."</i>	Action
	Performance Pathways	Blocked Pathway	<i>"Yeah both, some ... they do have the same abilities, other players just might be better, they might be okay for the standard you play against other teams, and they might be performing absolutely fine, but you've just someone else in the pathway that's better."</i>	Action
		Creating New Pathways	<i>"So has that player got the skill set or attributes to be able to play in a different position so that's a discussion, you know, if you see his pathway blocked, just say he's a midfield player but there are two or three midfield players ahead of him, you know, that discussion will look, can he play full back ...you know, can we convert him into a full back, or can we convert him into this position. And again, I think that just comes down to that discussion with that individual and the attributes or the potential we feel he has."</i>	Action

Results

Coach Beliefs

The outcome of the thematic analysis (Table 2) resulted in two main themes being established. The first was the “4-corner model” relating to coaches' perception of player abilities, applying the existing EPPP development model (Premier League, 2011) as a relatable main theme title. The second main theme, “player assessments,” considered the actual process applied during player selection. Additionally, a column has been added to establish whether the stated theme was a belief of the coach only, a method used to distinguish player selection (but not a previously mentioned belief), or a belief that was acted on within the selection process.

4-Corner Model

The 4-corner model embraces the concept of the need for wider holistic abilities, considering the need for psychological, tactical, technical, and physical abilities to succeed within academy football¹. Psychological abilities demonstrated a high contribution toward such perceived success across several areas. Behavioral skills were a key example, with one coach stating the following: “There are two areas, I think, that you cannot play professional football at the top level if you haven't got. I think it's enthusiasm, curiosity. So, attitude. Doesn't mean that you have the best character in the world, but it means you've got incredible drive and you're resilient.”

Additionally, resilience was highlighted as a key psychological trait. Players need to be able to handle adverse situations, of which the development pathway will have plenty: “You can have as much ability as you like, but unless you can deal with what football throws at you in terms of that psych and social corners, then the likelihood is you're not gonna get... you are only going so far up the ladder, you're not going to get past the next step.”

As expected, tactical skills were perceived as critical abilities to possess. Game understanding, a key contributor to tactical skills, was perceived as a defining ability, whereby top-performing players have developed

a greater game understanding than their lesser-performing peers. Game understanding considers cognitive processing, such as vision and decision-making. However, in consideration of the execution of game understanding, tactical competency was also perceived as an important ability. A lack of tactical competency also distinguished player performance standards.

Similar to tactical abilities, and in line with expectations, coaches placed a need for players to demonstrate technical competency. Technical competency has been suggested to be basic technical abilities, such as ball manipulation, passing and receiving, and defending skills (to list a few): “Because they're in an academy they should be good at dribbling, good at passing, good at defending, good at heading.”

Last, physical abilities included the need for specific and general physical abilities, as well as acknowledgement of maturation. Specific physical abilities were interpreted as being a player's possession of an outstanding physical quality; for example: “Yeah, the player has got exceptional physical abilities, he's got exceptional pace, and he's a great ball striker.” General physical abilities were interpreted as a player possessing a good foundation of athletic qualities required to perform in football. However, coaches acknowledged that possessing a strong physical ability alone was not sufficient to secure a contract during the selection process. Maturation was acknowledged as a confounding variable when comparing player abilities. Coaches appeared knowledgeable of the maturation variations that can be present and that comparisons should be done within similar biological age bands.

Player Assessments

The themes established within the main theme of player assessment highlight the procedures used by coaches to determine player standards in order to rationalize player selection outcomes. Player assessments consisted of objective assessments, subjective assessments and performance grading.

Within objective assessments, benchmarking was a prominent response from coaches. Coaches commonly stated the importance of

comparing players and identifying areas within each player that may need development. Similarly, responses also highlighted the need for forms of allometric scaling, more often referring to maturation and the ability to compare individuals of different biological ages. Linked to all of the above, coaches identified the need for holistic assessment of players, to ensure a full profile of a player was established when making player selections; for example, “And then we sort of really, by the end of it, we’ve kind of got an idea on profiling as to what that player is likely to be, based on their physical output, their technical and tactical output, and their sort of psychological profile as well.”

Within the subjective assessments, an expected criterion was for coaches to be able to determine the difference between player standards. Therefore, coaches were expected to distinguish perceptions of abilities. Linked to this, coaches also stated the need for ability to identify outstanding abilities and giftedness. Moreover, coaches believe they can perceive a player's current ability, identify players with outstanding abilities, and acknowledge players who possess giftedness (i.e., inherent abilities).

Selection Activity

The outcomes from the hypothetical selection activity underwent a second thematic analysis independent from the coach's beliefs (although, using the same code book). While some themes were shared with the coach's beliefs, several new themes were established during the selection scenario, notably within the subjective assessment theme.

4-Corner Model

Within the main theme of the 4-corner model, all the higher-order themes remained; similarly, with the exception of maturation, all the lower-order themes presented as means that coaches used to identify players' abilities to rationalize selection. It was apparent that coaches highlighted a clear maturation bias in player selection, which was polarizing to the coaches' initial beliefs. One coach, when asked why he had retained the chosen players, stated the

following: “I would say, if I was being brutally honest, they’re either top players or they’re early maturers.” Inversely, asked about players that were released, another coach stated, “I would say ‘late maturers’ is a theme.”

Player Assessments

During review of the main theme of player assessments, no objective assessment themes emerged within the selection scenario. However, as expected, all the subjective assessment themes were evident in rationalizing player selections. Interestingly, two additional higher-order themes emerged within the subjective assessments theme: performance grading and performance pathways. Performance grading consists of identifying each player's current performance standard, in order to compare performance within a team. Acknowledgment of consistency in performance was related, as this was stated to be a confounding variable in distinguishing player potential: “Whether they’re high performers to low performers, it’s the consistency of their performance.” Last was the coach's ability to compare players against expectations in performance, with an example from one coach who stated the following: “He just hasn't performed to the level in comparison to the ones above him that we are expecting; that is the level required to be a scholar.”

Performance pathways were observed to be a critical factor in deciding a player's progression. Blocked pathways were particularly prevalent as a means to prevent players from progressing, regardless of their abilities: “Yeah both, some ... they do have same abilities, other players just might be better, they might be okay for the standard you play against other teams, and they might be performing absolutely fine, but you’ve just got someone else in the pathway that’s better.” At the same time, when necessary, creating new pathways was a further action that sought to overcome a blocked pathway.

Discussion

The present study sought to gain greater clarity and depth of knowledge regarding player selection (the process of determining player retention or release) in academy football. This was achieved by applying a 2-stage interview process with academy coaches for two purposes: (1) determine coaches' beliefs in player selection, and (2) undertake a hypothetical selection activity and identify whether coach beliefs were acted on when determining player selection outcomes. The key findings suggest that while coaches' beliefs towards player selection acknowledged a wide range of abilities and processes, the hypothetical selection activity demonstrated a far narrower criteria used to select players. Furthermore, the selection activity demonstrated a strong emphasis on current performance, while also exhibiting a maturation selection bias, ultimately highlighting a lack of consistency between what coaches, and what they actually do, in selecting academy players.

Coach intuition plays a prominent role in football player selection, with previous research supporting the use of its application (Sieghartsleitner et al., 2019). Research by Sieghartsleitner et al. (2019) found coaches' subjective assessments to hold high prognostic validity with an ability for coaches to make ~70% overall correct selection decisions. Therefore, coaches are capable of selecting (or releasing) the correct players a high majority of the time. In consideration of such findings, the present study has not sought to challenge coaches' abilities in selecting the correct players, but to understand whether coaches are cognizant of their approaches when undertaking such processes. The findings in this study found that the coaches' beliefs about player selection, and the actions applied, substantially differed in that the knowledge of the coaches was considerable, but the application of such knowledge was limited. This aligns with the notion that demonstrating competency does not make an individual competent (Collins et al., 2015); that is, competency is having the underpinning knowledge, while being competent is acting accordingly on such knowledge (Collins et al.,

2015). Considering all themes, only 50% were identified as being beliefs that were acted upon. Likewise, when themes relating only to the selection process were isolated, 50% were actions only, which implies that they were not previously mentioned during discussions of coach beliefs. Such outcomes suggest that not only do coaches use criteria narrower to what they think they do, but coaches may also be unaware of the disparity between their beliefs and actions.

Research in higher education (Jones, 2009), coach development (Partington, et al., 2022), football (Partington & Cushion, 2013) and rugby (Ashford et al., 2022) has previously investigated how teachers/coaches believe they deliver their sessions versus what they actually do in practice. All of this research work lends to the concept of espoused theories and theories-in-use, as proposed by Argyris and Schön (1974). Espoused theories are those that people believe their behaviors are built upon (i.e., what individuals think they do); theories-in-use are what underpins behaviors in action (i.e., what individuals really do). So, when a coach is questioned about specific scenarios (i.e., player selection), the coach's typical response is derived from an espoused theory (Argyris & Schon, 1974; Jones, 2009). On the other hand, theory-in-use is the observation of what actually occurs (i.e., results from the hypothetical selection scenario), and that may substantially vary from the espoused theory (Argyris & Schon, 1974; Jones, 2009). Reasons for such variations in beliefs and actions have been largely attributed to coaches' lack of awareness (Jones, 2009; Partington & Cushion, 2013; Partington et al., 2022), with additional suggestions that consider pragmatic decisions (i.e., no two real-world scenarios are the same and may require different approaches) (Jones, 2009). Regardless, given that players will be provided with specific development programs to improve performance and selection chances, the separation of coaches' beliefs from their actions is highly problematic (Collins et al., 2022; Taylor et al., 2022). Therefore, coaches must become more aware of the difference between what they think they do and what they actually

do to affect player development and selection in the best way possible.

Attention should also be paid to the themes that are acted upon, given the strong emphasis on current performance. Generally, coaches acknowledged that they typically opted to retain the high-performers and release the low-performers. Coaches did demonstrate some rationale for selection based on future beliefs (i.e., potential), showcased in acknowledging pathway blockages (e.g., more players of the same position than selection availability). Players who were perceived as high performing may not be able to progress if remaining in the same position (due to players of the same and older ages currently performing better); they may need to change positions to enhance their retention chances. However, such beliefs are still based on current performance, as lower-performing players were not afforded the same consideration (which may have enhanced their performance abilities). Regarding current performance, a probable influence is the time frame coaches are traditionally afforded within academy football. While coaches are mindful of long-term developments, decisions are typically made from short-term perspectives (i.e., next season), which can adversely affect the selection of athletes who may have the greatest potential (Baker, Schorer, & Wattie, 2018). In other words, players exhibiting the best attributes now (i.e., short-term achievement) are selected over players who are yet to develop such abilities.

Consistency in performance is an additional determining factor in player selection. However, determining consistency, which may be measured in elements such as game understanding and decision-making of the players, is subjective. While research has determined no differences in players' decision-making abilities by position (Andrade et al., 2021; Murr et al., 2021), studies have acknowledged that coaches may have a bias toward their perceived "best decision" based on their positional expertise (i.e. attacking or defending) (Levi & Jackson, 2018). Therefore, positional demands may further magnify perceptions of decisions. For example, an error by a defender results in a potential goal-scoring

opportunity for the opposition, which might be perceived to be far worse than an error by a striker, which results in the loss of possession in the opposition's half. Such bias based on one's own experience and abilities may lead to further issues in accurately determining performance standards and, by default, assessing consistency in performance. Additional issues in utilizing consistency as a selection tool are found in regard to maturation, given that youths will have "ups and downs" particularly during the growth spurt (Cumming et al., 2017). During the "adolescent awkwardness" period, the human body grows rapidly, which adversely affects proprioceptive ability and results in a decline in motor unit performance (Cumming et al., 2017). Consistency in performance is expected to decline during this period, further complicating selection decisions made without more consideration of maturational status. Coaches should be mindful that short-term sacrifice (i.e., accepting the current quality of a player's performance) may allow future opportunities for enhancing the quality of the player's long-term performance (Baker et al., 2018; Cote et al., 2009). Selection decisions should take into consideration (or, at least acknowledge) short- and long-term goals, and aim to strike a balance between the two to ensure optimal player development and performance.

Regarding the maturation factor, a bias was observed within the selection process. While the coaches exhibited good knowledge of maturation when expanding on their beliefs, in the selection activity there was evidence that coaches associated higher-performing players with advanced maturation status; likewise, lower-performing players with late maturation status. This clearly demonstrates a maturation selection bias (Cripps et al., 2016; Cumming et al., 2017; Cumming et al., 2018); that is, players exhibiting early maturation are perceived as high potential and those exhibiting late maturation as low potential (Cripps et al., 2016). Extensive research on the early advantages of maturation typically being attenuated beyond the average age of peak growth (Cripps et al., 2016; Cumming et al., 2017, 2018; Malina et al., 2015; Meylan et al., 2010) indicates the

strong possibility for the misidentification of a player's potential (likely observed within this study). During a coach's player selection process, to overcome potential biases, players' maturation status should be considered, which suggests the need for the engagement of multidisciplinary personnel (e.g., strength and conditioning coaches, sports scientists, or physiotherapists) in the process.

Regarding objective assessments, the coaches' stated beliefs indicate that all were receptive to such input, yet during hypothetical selection activity they failed to rationalize player selection by utilizing objective testing results. This may be due to the coaches' lack of access during the hypothetical selection activity to a multidisciplinary team who, within the academy setting and actual selection process, would contribute directly. But this also raises concerns that coaches do not collaborate effectively with multidisciplinary personnel. This may be due to lack of access to a wider range of personnel, lack of resources to gather meaningful objective data effectively, low perceived ecological validity, or a communication barrier between technical coaches and sports scientists. Such hurdles need to be overcome in order to improve the player selection process and ensure that player development efforts by coaching personnel are harmonious and effective.

Finally, in investigating the traits coaches deem as important for future success, this study identified a holistic skillset. Coaches reported players' need for psychological, technical, tactical, and physical abilities. While some of these traits were generic, others were unique (although apparent, generic attributes were more foundational, with unique attributes defining the higher performers). For example, psychological abilities highlighted specific needs for behavioral skills and resilience. This aligns with previous work investigating attributes in football which reported psychological skills (similar to those listed) as being highly important (Kite et al., 2022; Larkin et al., 2017; Roberts et al., 2019). Conversely, these perceptions are based upon coaches' beliefs about psychological abilities, instead of

objectively measured skills. This raises major concerns given that coaches are not qualified to make such assumptions. This was also true for game understanding (encompassing decision-making skills), which is highly subjective and experienced based (as discussed above). Therefore, while coaches may be correct in acknowledging the importance of these attributes, further research should explore alternative methods of measuring such abilities to enhance reliability in assessment outcomes.

Limitations

This study is not without limitations. One limitation pertains to the environment and method through which the data were collected. Coach behaviors may have been influenced by the knowledge that they were research participants, potentially resulting in their stating perceived "best" practice over current practice. Therefore, it is plausible that the gap between beliefs and actions was a consequence of the methods applied; that is, coaches may have perceived a pressure to demonstrate best practice over actual practice.

A further limitation of the study is the consideration of positional differences. While the outcomes provide depth of information about the selection and deselection of players, these are broad beliefs about players in general; there may be benefit from focus on individual playing positions. Further research may consider a similar approach with a classification of playing positions within the team sheets.

Last, research may consider variations by academy category status. Within the current study, academy categories 1-3 were merged to create a singular output. However, there may be value in gaining an understanding of variations that may occur across categories in order to offer guidance on best practices. The high degree of variation in financial input, resources, and staffing across categories suggests that high variation is probable in the selection processes.

Conclusion

The present study sought to provide greater clarity in understanding the processes applied by coaches during player selections, and whether their beliefs and actions align. The findings of this study found a discrepancy between what coaches think they do and what they actually do during player selection. It was apparent that an emphasis was placed on the current performance of players, more so than other attributes, which conflicts with the coaches' stated beliefs about holistic abilities and identifying future potential. Additionally, consideration of maturation was established as a prominent concern; that is, while coaches comprehend the need to measure and compare players and consider maturational variation, when they undertake a player selection scenario, a maturational bias was clearly evident toward selecting early maturing players.

On a positive note, coaches proactively think about player pathways, whether a player may have a blocked pathway (which may create a barrier for them, regardless of performance standard), and ways to overcome such barriers, such as creating new pathways (i.e., changing positions early enough to afford the player time to develop into their new role). Moreover, the subjective nature of the selection process highlighted some clear biases that must be addressed in order to optimize player selection. Therefore, while the utility of coach intuition plays a key role in observing talent, the utility of multidisciplinary staff and objective data should be used to reinforce coach beliefs and overcome potential biases.

Endnote

1. While the EPPP highlights the 4-corner model to be inclusive of "social" needs, this has been adapted for reliability within the current research, given that social factors were limited in the present findings.

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 the research reported in this article was conducted in accordance with the Ethical Principles of the *Journal of Expertise*.

The authors declare that the dataset is not publicly accessible but will be made available upon reasonable request.

ORCID iDs

Rich J. Kite
<https://orcid.org/0000-0002-9336-4625>

Michael Ashford
<https://orcid.org/0000-0002-7723-5153>

Mark R. Noon
<https://orcid.org/0000-0002-1113-8406>

Rhys Morris
<https://orcid.org/0000-0001-5433-9788>

Neil D. Clarke
<https://orcid.org/0000-0002-1909-329X>

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