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# Coaching strategies to develop desired psychological attributes within academy soccer players

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## ABSTRACT

The mentality of youth soccer players is one of the most important contributors toward their success within the game. However, there is a lack of consensus regarding the attributes that might be most important in this context, and limited knowledge to support coaches in developing the desired psychological attributes in players. To address this, we conducted a two-phased study. First, we explored coaches' perceptions of the psychological attributes that give players the best opportunity to progress through academies and into professional soccer (phase one). Reflexive thematic analysis (RTA) of semi-structured interviews with nine senior academy coaches led to the development of eight psychological attributes: commitment to develop; coping with demands; self-awareness and reflection; emotional control; confidence; drive to achieve goals; work ethic; and resilience. Second, we aimed to identify coaching strategies that support the development of these eight psychological attributes (phase two). Semi-structured interviews with 12 academy soccer coaches, followed by RTA, led to the construction of 55 coaching strategies alongside adaptive player behaviors that indicate the successful development of each attribute. Our findings advance current understanding of the psychological attributes that can support youth athletes' progression into professional soccer. Moreover, we provide support for the coach-practitioner by offering conceptual and practical insights into the coaching strategies and behavioral indicators that can facilitate coaches' endeavors to develop the psychological performance of players. In doing so, our findings may act as a framework to remove previously reported barriers to coaches addressing the psychological development of athletes through their coaching practice.

*Lay summary:* We explored the psychological attributes that facilitate youth soccer players' performance and progression through academies and into the professional game, and the coaching strategies that support the development of each attribute. Professional youth soccer coaches identified eight attributes, 55 developmental coaching strategies, and the behavioral indicators associated with each attribute.

## IMPLICATIONS FOR PRACTICE

- Academies and academy coaches can target the eight psychological attributes as part of their holistic (i.e., technical, tactical,

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physical, social, and psychological) development of the academy soccer player.

- Coaches should take a lead in, and fully integrate, the psychological development of their players into their daily practices, which can be supported through the coaching strategies identified in this research.
- Coaches and practitioners can gauge the psychological development of academy players through observation of the adaptive player behaviors presented.

English soccer academies are high performance environments designed to produce professional soccer players. With the attraction of the Premier League, and the financial rewards of becoming a professional player in England, the competition for places in academies and subsequent professional contracts has become increasingly challenging. Indeed, of the 3500 registered players in Premier League academies, “only 0.5% will ever make a living out of the game” (Kelner, 2021). Consequently, academy staff are becoming more interested in improving the efficacy of approaches to player development and progression (Dugdale et al., 2021).

While technical, tactical, physical, social, and personal factors will shape an individual’s performance and development, there is a growing consensus that the psychological capabilities of a young athlete are integral contributors toward their progression into elite adult sport (Saward et al., 2019). Indeed, within elite youth soccer in England, the recognition for sport psychology and its importance within talent development is increasing (e.g., Daley et al., 2020; Mitchell et al., 2022), a situation accelerated by the introduction of the Elite Player Performance Plan (EPPP) in 2012 (see The Premier League, 2011). The EPPP was developed as a mechanism to structure and improve the accountability of professional club academies with the mission of producing more, and better, homegrown players (Jones, 2018). One area that the EPPP has helped to enforce, which has been traditionally (and noticeably) absent within youth soccer academies, is the psychological development of players (see Gervis et al., 2020). Specifically, the EPPP proposes that academies address four psychological areas: stress management; lifestyle management; imagery; and focusing. However, despite the merits of developing such areas, there is limited explanation as to why these are prioritized over other attributes cited within elite youth soccer literature (e.g., Mitchell et al., 2022). Given that the EPPP is now over 10 years old, and the demands placed on the modern-day academy player have rapidly evolved, it is crucial to elucidate understanding of the key psychological attributes that will give a player the best opportunity of making the successful progression through youth to professional soccer and how these might be developed in players efficiently and effectively.

While a number of psychological competency frameworks associated with athlete development and peak performance have been promoted across sports (e.g., Gould et al., 2002), one body of work that has contributed significantly to the psychological development of academy soccer players is the 5Cs framework (Harwood, 2008; Harwood et al., 2015). Through this framework, Harwood and colleagues advocate the importance of *commitment, confidence, control, communication, and concentration* and

have detailed how coaches can integrate the development of these psychological attributes into their coaching practice through the PROGRESS model (promotion; role model; ownership over decisions; growth of the attribute; positive reinforcement; empowering peer support; supportive teammates; and self-review). Since its induction, the 5Cs framework has been employed by researchers and practitioners working in soccer academies (e.g., Daley et al., 2020; Steptoe et al., 2019) and, notably, by the English Football Association (FA) where it has become an integral part of youth-sport coaching awards (FA Learning, 2020). However, despite its significant contribution to sport psychology provisions in youth soccer, the attributes within the 5Cs framework originate from research conducted outside of soccer (or academies). Further, Harwood's and Harwood et al.'s research that explored the application and efficacy of the 5Cs framework is potentially limited as the participating coaches in both studies only represented under nine to under 13s age groups. The utility of the 5Cs framework to support athletes successfully progressing into the later academy phases (e.g., professional phase, 17-23 years; see The Premier League, 2011) and then into the senior game, therefore, requires further consideration given the evolving psychological attributes required at this stage of specialization (Morris & Deason, 2020). Indeed, in consideration of the contextually pertinent psychological attributes required by male soccer players to deal with the demands experienced at different stages of their developmental journeys, researchers have recently added to the 5Cs framework, including attributes such as resilience and self-awareness (e.g., Mitchell et al., 2022).

Adopting a broader framework to explore career progression within EPPP-governed soccer academies, Saward et al. (2019) tasked 111 players from two soccer academies to complete the PCDE (psychological characteristics of developing excellence) questionnaire, finding that *coping with performance and developmental pressures* and *evaluating performances and working on weaknesses* were the only two predictors of progression into the professional phase of academy soccer. Saward et al.'s results highlight the caveat of assuming the utility of PCDE's to all populations, and the limitations of such deductive approaches in ascertaining the key attributes required of academy players. Indeed, in their systematic review with meta-analysis, Ivarsson et al. (2020) concluded that psychological factors only had a small effect on progression or performance in soccer, yet in the 11 studies reviewed, the psychological factors considered were pre-selected by research teams. Such findings demonstrate the importance of inductive explorations of the salient psychological attributes required by academy soccer players to progress in the game, providing greater direction for psychological support.

To date, player dominated samples have shaped our understanding of psychological attributes that may support soccer players (Daley et al., 2020; Gledhill et al., 2017). For example, Holt and Dunn (2004) identified a range of psychological factors thought to be associated with soccer success (e.g., discipline, commitment, resilience, social support), but predominantly sought the views of players. A greater input from academy coaches would, therefore, be a valuable addition to the field, offering an experientially informed and expert perspective of the psychological requirements for academy soccer player performance and progression (Musculus & Lobinger, 2018). In an early study that addressed this, Mills et al. (2012) explored the key influencers and environmental

“catalysts” (p. 1597) of talent development in a soccer academy. Through interviews with 10 expert academy coaches from English Premier League and Championship clubs, Mills et al. identified awareness, resilience, goal-directed attributes, and intelligence as psycho-social factors that influenced academy to first team progression. Despite their focus on the academy coach, since Mills et al.’s study, the youth soccer system in the UK has had a significant over-haul through the commencement of the EPPP, which has placed new demands upon players. Thus, research exploring coaches’ perspectives, with a sharpened focus on the key psychological attributes that will give the *modern-day* academy player the best opportunity to progress, remains warranted.

Despite being recognized as one of the most influential agents in a soccer players’ psychological development, coaches have generally remained detached from the sport psychology provision in academies (European Club Association [ECA], 2017). The EPPP suggests that psychological support falls under the remit of the education or safeguarding (or welfare) officer, an additional responsibility that is believed to have contributed toward its ineffective provision (see Jones, 2018). Further, Gervis et al. (2020) found that most sport psychologists working in academy soccer in the UK are employed on a part-time basis, substantiating the consensus that the provision remains isolated from the daily practices of the academy, predominantly serving as a one-to-one service (Daley et al., 2020). Given these shortcomings, it is necessary to turn attention to the academy coach to inform and concurrently promote the psychological development of players.

Despite suggestions that coaches lack an understanding of sport psychology, researchers have also suggested that coaches are indeed capable of informing psychological practices and should be encouraged to do so (e.g., Daley et al., 2020; Harwood, 2008). A more consistent assertion is that coaches *want* to learn and discuss sport psychology, representing a positive shift from previous reports by Pain and Harwood (2004), and one that should be exploited (Harwood, 2008). Research that first explores *which* psychological attributes are potentially the most important for the modern-day professional soccer academy player to possess, followed by *what* coaching strategies can be used to support their development, appears integral to improving the psychological development of academy players. With the enactment of the EPPP recently questioned and researchers critical of the application of psychological support, it is timely (even overdue) to further involve the coaches in the development and application of this provision (cf. ECA, 2017). Thus, through a multi-phased research project, we aimed to first explore coaches’ perceptions of the psychological attributes that give players the best opportunity to perform and progress through academies and into professional soccer, referred to herein as *success* (phase one). Second, we aimed to identify coaching strategies that support the development of the attributes constructed in phase one, as well as the adaptive behaviors that indicate whether a player has successfully developed the attribute (phase two). By addressing these aims, we hope to provide coaches with clear direction for developing psychological qualities in academy players, supporting their holistic development as they journey toward becoming a professional player. We first present the methods adopted in each phase before combining the findings of both phases to link the attributes to development strategies and avoid unnecessary repetition.

## Methods

### Research design

The current research is underpinned by the ontological and epistemological assumptions of relativism and interpretivism (Sparkes, 1992). From this position, researchers view the world as a construction of an individual's "subjectivity, interests, emotions, and values", interpretations that form a person's social reality (Sparkes, 1992, p. 25). Understanding a person's social reality requires an interactive and collaborative approach where the researcher and participant combine to become the research team to enhance understanding of individuals' interpretations of their own experiences (Guba & Lincoln, 2008). The interpretivist position, therefore, provided us with an avenue to explore coaches' opinions regarding the psychological development of players, representing an appropriate means to augment understanding of academy soccer players' psychological needs and the coaching strategies used to address them.

To attend to our research aims in accord with our philosophical position, and thus ensure methodological coherence (cf. Poucher et al., 2020), we constructed a two-phased study using two separate samples of professional academy coaches, and the naturalistic method of semi-structured interviews. In phase one, we explored the psychological attributes required by academy soccer players to aid performance and progression. In phase two, we examined the coaching strategies that could develop those attributes and the behaviors associated with each. The purpose of this design was to: (a) afford participants greater space to talk solely about the aims of each phase, creating opportunity for richer data collection; (b) examine the experiences of a wider range of purposively selected coaches from a context typically difficult to access; and (c) use separate samples of coaches for each phase to reduce the likelihood of potential bias about the most salient psychological attributes (e.g., reducing the prospect of phase one participants only identifying the attributes that they develop explicitly). Data from each phase were analyzed using reflexive thematic analysis (RTA) with an *experiential orientation* (see Braun & Clarke, 2022). This approach ties together our philosophical assumptions, research aims, and methods as it emphasizes the illustration of the multiple realities of participants by encouraging the researcher(s) to act as a resource, playing an active role in the analysis through a considered interaction with their data (participants' experiences) and engaging with the analysis process in a reflexive manner (Byrne, 2022).

### **Phase one: Identifying psychological attributes required for academy player success**

#### **Sample selection and participants**

Participants were purposively selected (cf. Patton, 2015) based on them meeting the following criteria: (1) Union of European Football Associations (UEFA) Advanced License qualified; (2) currently in a full-time *senior* position (e.g., head of phase or head of coaching) at an English Premier League or English Championship club EPPP category-1 academy (the highest ranking of an academy, see The Premier League, 2011); and (3) had worked in their academy position for over two years. Twelve coaches were initially contacted, with 10 agreeing to participate. However, one individual was promoted to the role of senior first team manager after agreeing

to participate. The final sample, therefore, consisted of nine male academy coaches, with an average age of 37 years ( $SD = 10.6$ ). Participants fulfilled the following roles: lead professional development phase (PDP) coach (manages the U18-U23 age groups;  $n = 2$ ), lead youth development phase (YDP) coach (manages the U12-U16 age groups;  $n = 2$ ), head of goalkeeping ( $n = 1$ ), head of coaching ( $n = 2$ ), and assistant academy director ( $n = 2$ ). At the time of the study, each coach had worked in their position for an average of 3.6 years ( $SD = 1.2$ ) and had worked in academy soccer (predating the EPPP) for an average of 7.7 years ( $SD = 4.9$ ). The selected sample were well-positioned to provide insight into the key attributes that players require to perform and progress through the academy, having had the experience of being the gatekeeper (or contributing toward the decision) to a professional contract.

### **Interview guide**

The interview guide (available on request) was designed to construct knowledge and, therefore, several open-ended questions pertaining to the aims of the study were asked to each participant. The guide was split into four distinct sections: approach to coaching; important psychological qualities for an academy player; defining the psychological attribute; and summary (used to enhance methodological rigor). Questions were followed by probes to enrich answers and ensure a more complete understanding of participant experiences was obtained. Following some introductory questions designed to encourage participant engagement and build interviewee-interviewer rapport, participants were asked “what are the key psychological qualities needed for the modern-day professional footballer (soccer player)?”, with probes including: “why are the ones you mention particularly important?” and “how do you recognize each of these key qualities in the behaviors of players, what do they look like?”.

### **Procedure**

Following Institutional Ethics Board approval, coaches who met the sampling criteria were contacted through the sport psychologist or head of sport science at two EPPP category-1 soccer academies. Those who agreed to participate provided written, informed consent before being interviewed at a location of their choice; all interviews took place at the academy training ground of participants’ respective clubs. An interview preparation booklet, which contained a series of statements (e.g., think about the players who have progressed through the academy and the attributes they possessed that helped them to succeed) designed to aid recall of specific experiences/practice-based examples and facilitate an in-depth data collection process, was sent to each participant in advance of the interview (cf. Croyley et al., 2016). Each semi-structured interview was audio-recorded and lasted, on average, 63 minutes ( $SD = 13$ , range = 40-88 minutes). Interview recordings were subsequently transcribed verbatim, yielding 143 pages of single-spaced text. Participants were given the opportunity to review their own transcript to check for any errors that may have occurred during the transcription process. All participants approved transcription accuracy.

### **Data analysis and methodological rigor**

To analyze phase one data, and to inform phase two, we initially followed the first five of the six-step approach to reflective thematic analysis (RTA; familiarization, generating initial codes,

theme generation, reviewing, defining, and report production, see Braun & Clarke, 2022). We adopted this approach as we were interested in understanding our participants' sense making of the key psychological attributes for academy soccer players and, thus, saw data (language) "as reflecting participants' contextually situated unique realities or truths" (Braun & Clarke, 2022, p. 8). Consequently, we used a combination of both semantic and latent coding (see Byrne, 2022). Initially, all transcripts were read multiple times to enhance familiarization with the participants' worldviews, and to give opportunity for initial patterns within the data to be recognized in an inductive manner. Second, segments of text were then coded by the first author, a process generating 292 data codes (e.g., belief in the self; not fearing failure), which were subsequently used to construct an initial 25 themes (e.g., learning from experience; motivated). These codes and themes were then interrogated by the other authors who actively challenged the first author's interpretations (e.g., as critical friends; Smith & McGannon, 2018) leading to the refinement of 25 themes into ten, and finally into eight themes. Each refinement was an active process involving all authors. An example of a critical discussion between authors was the delineation between the themes *resilience* and *coping with the demands of high-level sport*. The questions posed by Braun et al. (2017; e.g., *are there enough meaningful data to support this theme?*) were posed and relevant literature referred to e.g., Sarkar and Fletcher (2014). Consequently, resilience and coping with demands were kept as distinct themes. Once themes were confirmed a further, deep, analysis of each theme and its underlying codes led to the defining and naming of themes, which are presented in the results (Byrne, 2022).

## **Phase two: Coaching strategies to develop the identified psychological attributes**

### **Sample selection and participants**

We sought a sample with the qualifications and contextually relevant experience to discuss how the attributes constructed in phase one could be developed through coaching practice as well as offer in-depth insights into the behaviors that may indicate that the attribute has been developed. Thus, we used a purposive method to select participants based on the following criteria: (1) they did not participate in phase one; (2) qualified to UEFA Advanced License standard; (3) a minimum of four years' coaching experience within a soccer academy across either the youth development or professional development phase (see The Premier League, 2011); and (4) coaching full-time within an academy. Subsequently, participants meeting the criteria were selected from three soccer club academies of category-1 or -2 status, with the professional team of each academy competing in the Premier League or Championship tier of the English soccer pyramid at the time of data collection. In total, 12 coaches agreed to participate in the study. Participants were male, aged between 26 and 54 years ( $M = 35.8$ ;  $SD = 9.8$ ) with an average of 7 years ( $SD = 3.3$ ) of coaching experience at an academy level.

### **Interview guide**

The interview guide (available on request) was organized around the eight psychological attributes identified in phase one of this study. Following an introduction to the aims of the study and a reminder of the participant's rights, discussions commenced with a description of the attribute (see Tables 1–8) for consistency across all interviews, helping to ensure the participants were discussing their approaches in relation to the



psychological attribute as conceptualized during phase one. In line with our interpretivist epistemology, each question was open-ended and followed by non-directional probes. For example, for the attribute *emotional control*, participants were asked: (a) “what importance do you as a coach place on a player being able to manage emotions for themselves?”; (b) “how do you help a player to do this (get players to manage their own emotions)?”; (c) “tell me how your support differs from on the pitch to off the pitch?”; and (d) “what behaviors indicate that a player has developed emotional control?” Unless identified as part of an attribute’s construct, questions were not confined to strategies used on the training pitch or in competition. Questions remained open allowing for participants to freely discuss any strategies used across any situation, an approach more reflective of the coaches’ role in the holistic development of the modern-day academy soccer player.

### **Procedure**

Following Institutional Ethics Board approval, participants were contacted either directly or indirectly through a point of contact at one of three clubs. Twelve individuals agreed to participate and subsequently provided voluntary written informed consent. Participants were asked to select a suitable location for the semi-structured interview to take place; nine were conducted at participants’ respective academies, three were conducted in public locations convenient for the participant. All interviews were audio-recorded via Dictaphone, lasting for an average of 83 minutes ( $SD = 13$ , range = 52–97 minutes), and were transcribed verbatim in their entirety yielding 215 pages of single-spaced text. Again, participants were given the opportunity to review their own transcript, with all participants approving its accuracy.

### **Data analysis and methodological rigor**

To recognize patterns within the data and construct themes pertaining to aims of this phase, we followed a similar recursive approach to RTA as adopted in phase one, with the addition of step-six – *reporting of findings* (Braun & Clarke, 2022). Through semantic and latent coding, we generated 988 data codes (778 – strategies; 210 – behavioral indicators; e.g., applying pressure; increases effort). The codes relating to strategies for supporting the development of psychological attributes in players were coalesced into 55 themes, while the behavioral indicators of successful development were collated into 33 themes. Like phase one, authors concurrently reviewed the data through critical discussions, challenging the interpretations of the first author who initially coded and grouped the data (Smith & McGannon, 2018). Given that phase two had a deductive to inductive approach (i.e., questions were dictated by the eight attributes but the strategies to develop them were arrived at inductively), the review process was central to ensuring all relevant data were accounted for, even if it was not the attribute of focus at that point in that interview (see Braun et al., 2017).

### **Results**

Through phase one, eight psychological attributes thought to be key for academy soccer player development and success were constructed: *commitment to develop*; *coping with*

*demands; self-awareness and reflection; emotional control; confidence; drive to achieve goals; work ethic; and resilience.* Through phase two, 55 themes that represent our participants' perceptions of the strategies that can be used to develop the eight key psychological attributes were constructed alongside 33 themes relating to player behaviors that indicate the successful development of each attribute within male academy soccer players. This section presents each attribute, with a table that summarizes the associated constructed themes and supporting raw data quotes (Tables 1–8), illustrating the link between the research phases. The tables also aim to serve as a user-friendly guide for coaches, summarizing the information ready for application.

**Table 1.** Commitment to develop: description, strategies, and behavioral indicators.

Phase One	Phase Two		
<i>Themes associated to attribute and raw data quote example</i>	<i>Coaching strategy themes and raw data quote example</i>	<i>Behavioral indicators of successful development</i>	
<i>Consistency of adaptive behaviors - "They [players] show unbelievable desire and commitment ... all those players [who turned professional] used to do their reflections they would watch the whole game." (Reece, PDP)</i>	<i>Actively encourage and reward players for consistently demonstrating positive behaviors - "Both at school and on the pitch and off the pitch, you've [player] been outstanding, we got a box for this game at the stadium ... invite all the family." (Owen, YDP)</i>	Commit to extra training to improve	
	<i>Communicate with parents to help inform and support the players' Individual Learning Plan - "Informal dialogue between me [coach] and the parents, it might be a quiet word if you like, in order to get your message through to the player we might go through the parent in a different way." (Max, YDP)</i>		Communicates well with others Consistently works hard
<i>The reciprocal relationship commitment has with confidence and preparation - "Belief that if you do everything right in the week then my performance will be consistent." (Aidan, YDP)</i>	<i>Foster an academy culture that has clear expectations of player behaviors - "They [expected behaviors] are driven by the environment, by the culture of the Academy. What is perceived as good behavior, what does good look like ... being consistent with the messages to the players." (Joe, PDP)</i>	Prepared for training Readily gathers information to allow them to succeed	
<i>Commitment to own development - "Commitment is on and off the pitch ... the way you look after yourself, then everyday looking to improve." (Levi, YDP)</i>	<i>Give players individualized targets each session and advise them how to improve - "Do they [players] know how to affect their super strengths? If not, set targets each session linked to those. Psychologically from that are they more confident, a bit more resilient, a bit more resourceful? If not, you've got to intervene to support them." (Callum, YPD)</i>		
	<i>Provide opportunity for player ownership - "The players have the option of coming in to training earlier to meet-up, get extra work in ... it's up to them though, it's about getting their buy-in and it [early attendance] being their decision." (Phil, YDP)</i>		
	<i>Use role models to challenge players further - "For example, 'here's a video on Toni Kroos and his receiving skills, have a look at this, has few touches, his awareness' how might this influence your game?" (Tom, YDP)</i>		

**Table 2.** Coping with the demands of high-level sport: description, strategies, and behavior indicators.

Phase One	Phase Two	
<i>Themes associated to attribute and raw data quote example</i>	<i>Coaching strategy themes and raw data quote example</i>	Behavioral indicators of successful development
<p><i>The ability to independently cope with demands, expectations, and setbacks</i> - "Being able to deal with setbacks because that's the biggest thing, if you're not prepared to learn you're omitting yourself straight away. If you can't deal with setbacks you won't last in this game for two minutes." (Luke, PDP)</p> <p><i>Strategy to cope with setbacks</i> - "As a player gets older ... it becomes more around the psychological side of dealing with those mistakes ... It's [pressure] starting to kick in earlier because your 14 year-old is being judged on whether to offer them a full-time scholarship next year. So those pressures now start to kick in." (Clive, YDP)</p> <p><i>The pressures and setbacks that originate from deselection</i> - "Dealing with setbacks whether that's a case of not being selected, having to play down [lower age], playing well then all of a sudden you're out of the team for whatever reason, it could be being substituted at half-time because they're [player] not doing something right." (Aidan, YDP)</p>	<p><i>Manufacture challenge within training and competition</i> - "More competitive football program ... results driven floodlit cup tournaments, tours ... has really helped prepare our players for a result driven industry." (Max, YDP)</p> <p><i>Encourage a positive and autonomous team environment</i> - "We just did a 'come dine with me' the other week where the kids will cook for the parents ... they could be away from their families from Sunday evening right through until Friday night." (Phil, YDP)</p> <p><i>Honest and calm conversations with players</i> - "We [coaches] have six week reviews with them [players] ... they will present to us about their perceptions of their development and we will feedback to them about where they are on a level." (Pat, PDP)</p> <p><i>Consistently emphasize expectations of being an academy player</i> - "The schedule is communicated to them [players], and within that schedule what we expect today - you're expected to be here at this time ... make sure got your kit - I'm not having a go at players I'm just telling them how it is, how they need to be organized because at first team level players aren't given room for interpretation of rules." (Owen, YDP)</p> <p><i>Orchestrate the support system for players during times of adversity</i> - "Support group ideally with the coach aware of everything that is going on and every conversation and strategy that's going on to help them [players] through that [adversity]. I think with the multidisciplinary approach that we are closer than ever to working to a higher level of support for players in difficult moments." (Owen, YDP)</p>	<p>Will independently cope with demands, expectations and setbacks</p> <p>Employ strategies to cope with a setback</p> <p>They manage the pressure and setbacks originating from deselection</p>

### **Commitment to develop**

The theme *commitment to develop* was characterized as *an individual's demonstration of consistent behaviors that contributed to their own development as a soccer player* (see Table 1). Throughout the interviews, the participants outlined the need for consistency of adaptive behaviors (e.g., being on time) as fundamental habits for players to possess. During phase two interviews, to develop players' *commitment to develop* participants suggested that coaches should readily praise positive behaviors, provide structure and guidance for career progression, and use role models to challenge players to develop themselves (see Table 1). The utilization of video footage (that is easily accessible) was recognized by participants as a useful way to make players aware of the elements of their

**Table 3.** Self-aware and reflective: description, strategies, and behavior indicators.

Phase One	Phase Two	
<i>Themes associated to attribute and raw data quote example</i>	<i>Coaching strategy themes and raw data quote example</i>	<i>Behavioral indicators of successful development</i>
<i>Self-awareness impacts players behaviors - "I think that [self-awareness] starts a cycle of making decisions and basically their execution, but that's off the pitch as well as on the pitch." (Matt, YDP)</i>	<i>A coaching style that promotes the development of self-awareness - "If you're [coach] just on it too much all the time then you just blend into the noise ... then at some point people just switch off because you're just noise. [Be the person who] when I have something to say people listen." (Ben, PDP)</i>	<i>Aware of own emotions and able to regulate them</i>  <i>Demonstrates a change in behaviors over time</i>
<i>Successful players more readily self-reflect and develop weaknesses - "Players need to find out information ... it's not a one-way street ... they need to come and get information from us and come and communicate and ask us things." (Edward, PDP)</i>	<i>Design an individual player development plan for each player - "Being aware of what some of their [players] weaknesses are ... individual feedback coupled with an action so it can't just be a statement of 'this is your weakness', it is got to be 'this is an area of weakness, think about this or try this so there is a get out to improve upon that weakness'." (Max, YDP)</i>	<i>Self regulates own development</i>
<i>Self-awareness is an important psychological attribute - "I think developing it [self-awareness] is something we need to with kids early on." (Calvin, PDP)</i>	<i>Design of practice sessions that encourages players to become more aware - "Sometimes just by putting players in the environment where they're going to have to just deal with it [difficult situations]. Like 'if you are obviously not comfortable on your left [foot] we're going to put you on the left side'." (Jim, YDP)</i>	
<i>Being present in all situations to maximize development - "Being in the present ... Be there. Listening to what you are saying and processing things that link to what you say to make myself better." (Matt, YDP)</i>	<i>Use players who show high levels of self-awareness as role models - "On the grass asking them [players] to watch other people, getting them to think about others' strengths and what they mean personally, getting other players to help them and stuff like that." (Pat, PDP)</i>	
	<i>Task players to reflect on footage of previous performance - "Individual [video] clips so they [players] will see every time they're involved in the game ... a chance for them to be self-aware of something maybe that they are not doing. It could be an emotional reaction could be a technical small thing." (Lloyd, YDP)</i>	

performance that they could develop and, therefore, also act as a catalyst for setting and pursuing goals. Further, opportunities for player autonomy were highlighted by participants explaining the importance of giving players space to have ownership over their development (e.g., player led team talks, time for individual development). Regarding behaviors, participants described how players who are *committed to develop* would be active in improving their performance, and frequently communicating with coaches (and support staff) to gather information to help their development (see Table 1).

### **Coping with the demands of high-level sport**

The theme *coping with the demands of high-level sport* was conceptualized as *the ability of players to independently manage the varying demands associated with the*

**Table 4.** Emotional control: description, strategies, and behavior indicators.

Phase One	Phase Two	
<i>Themes associated to attribute and raw data quote example</i>	<i>Coaching strategy themes and raw data quote example</i>	<i>Behavioral indicators of successful development</i>
<i>Players need to manage a wide variety of emotions across situations - "Don't get too high with the highs don't get too low with the lows, because that's how your journey is going to be." (Luke, PDP)</i>	<i>Foster competition and challenge - "Putting in some demands on the game or putting in some condition ... might be a forfeit, might be little games to bring the competition element into game." (Lloyd, YDP)</i>	<i>Demonstrates control during moments of high and low emotion</i>
<i>Emotional control promotes resilience to difficult situations - "Things are not always going your way ... the referees ... other aspects in terms of that dealing with opposition players getting wound-up." (Levi, YDP)</i>	<i>Get players to focus on their strengths and set goals during times of heightened emotions - "We go to their [players] strengths ... trying to help them focus on what they can control as opposed to what the issue is." (Lloyd, YDP)</i>	<i>Focuses on goals during emotionally charged situations</i>
<i>Players need support in managing emotions - "The ones [players] that don't grow up quickly and don't mature struggle with some things." (Aidan, YDP)</i>	<i>Encourage players to understand why they lose emotional control - "Understand why and what sort of feelings they [players] have and then draw upon our experiences as coaches as practitioners to give that person guidance and rationality." (Max, YDP)</i>	<i>Learns from setbacks</i>
	<i>Provide considered and timely feedback to players about their ability to control their emotions - "As few words as possible ... I think that is the key ... it's really important for us [coaches] to be considered in the language we use ... what's our tone, our pitch." (Owen, YDP)</i>	<i>Views competition and challenges as an opportunities to develop</i>
	<i>Give players the opportunity to calm down before supporting them through their emotional response - "Worse thing you [coach] could tell someone when they're angry is not to do something ... They [players] will calm down, then its time to go and help, support and listen, then help them understand what has happened." (Callum, YDP)</i>	
	<i>Use of appropriate communication and tonality - "Withdrawing your own emotions and explaining the consequences of those behaviors." (Jim, YDP).</i>	
	<i>Use role modeling techniques - "Invest in talking to them [players], showing them clips, even real-life examples so if they behave in a certain way give him examples there and then." (Ben, PDP)</i>	

soccer academy talent development pathway through employment of effective coping mechanisms (see Table 2). Participants described how learning to cope with difficult situations (e.g., poor performances; conceding during competition; deselection or having sustained periods as a substitute) to achieve adaptive outcomes was an essential attribute. Further, participants accounted for how not being able to cope with such difficulties could have dramatic consequences on the longevity of a player's career, with such situations suggested to be significant enough to trigger a rapid exit from the academy. Similarly, being able to cope with the continuous demands of

**Table 5.** Confidence: description, strategies, and behavioral indicators.

Phase One	Phase Two	
<i>Themes associated to attribute and raw data quote example</i>	<i>Coaching strategy themes and raw data quote example</i>	<i>Behavioral indicators of successful development</i>
<i>Confidence influences behaviors and psych attributes - "He [international player] was always very humble, very grounded ... had some bad loans, didn't let that affect him. Self-belief is a huge thing." (Dan, PDP)</i>	<i>Support players to self-reflect to build confidence - "We see confidence improve where we put players in front of the Coach and a camera to present. The first time they do it [present] compared to the next, they think 'this is not as bad as what I thought', and they progress that way, which has been positive." (Lloyd, YDP)</i>	Confident players will drive high standards from peers Engage effectively with teammates Players consistently perform well against coach expectations
<i>A lack of confidence inhibits risk taking - "If they don't believe in themselves then ... it's a thing that makes them stand out." (Levi, YDP)</i>	<i>Set players challenging yet achievable targets - "If we make players aware that they can work on it [performance] so they improve through tough goals we can create opportunities where you can help them in relation to what they need individually." (Pat, PDP)</i>	Readily communicate with coaches They are energetic and hard working
<i>Confidence comes from different sources - "You've done everything right, you've trained hard you've worked hard, you've prepared, you've physically done everything that's been asked of you; you're confident knowing that you've done everything well." (Aidan, YDP)</i>	<i>Orchestrate support networks - "we will make sure they room with someone different ... so that there's an element of communication between them the players who they might not know so much to maybe develop a confidence of talking to that person." (Lloyd, YDP)</i>	Willing to be creative and not fearing of making mistakes
<i>Best players have resilient confidence - "You have a real habit in a belief ... you've got something that is going to make you a player." (Dan, PDP).</i>	<i>Know how best to support an individual's confidence - "One-to-one is powerful it's how well you know your players ... which ones could benefit from being highlighted to the rest of the group, and which ones are quite happy just cracking on." (Jim, YDP)</i>	
	<i>Increase player-led opportunities to practice - "Strikers in the older age groups do added activities called breakfast clubs on their finishing, but if, by doing that they know 'I feel like I've improved because I feel like I've spent time in a particular area.'" (Nigel, YDP)</i>	
	<i>Facilitate players to develop confidence by reducing perceived pressures - "We [staff] have to get the stuff out the way that causes low confidence" (Aaron, YDP)</i>	
	<i>Encourage players to further enhance their strengths - "Do what you're good at and keep trying to do that, have that something you can pull on to do." (Nigel, YDP)</i>	
	<i>Emphasize previous accomplishments to players - "Thumbs up or an arm around the shoulder or a pat on the back ... certainly around constructive praise, realistic and constructive praise." (Max, YDP)</i>	

academy life (e.g., intense training schedule; relentless intra-team and inter-team competition; pressures of a dual-career; and contract decisions) was considered by participants as fundamental to a player's ability to "survive and thrive" in academy soccer.

**Table 6.** Drive to achieve goals: description, strategies, and behavior indicators.

Phase One	Phase Two	
Themes associated to attribute and raw data quote example	Coaching strategy themes and raw data quote example	Behavioral indicators of successful development
<p><i>Engaged and focused in pursuit of individual goals</i> - "You know it's their [players] way of life that they want to be what they are trying to be. And it's not 'flavor of the month', it's a consistent drive." (Matt, YDP)</p> <p><i>Players need to be driven</i> - "It's trying to find the bits that you don't see them [players] doing, because that's the internal drive." (Calvin, PDP)</p>	<p><i>Goals need to be realistic and idiosyncratic to the player</i> - "They [players] have their own goals that they will set for 6-week review ... they're all realistic and individual to them." (Max, YDP)</p>	<p>Able to recall the aims of the session or individual aims</p> <p>Goal-directed behaviors</p>
	<p><i>Objective measures and analysis of performance can help players to focus upon goals</i> - "GPS data so we can look at physical performance .... that might focus a player's efforts." (Nigel, YDP)</p>	<p>Players that practice independently to improve</p> <p>Players who constantly apply themselves toward their goals</p>
	<p><i>Learn about a player to inform coaching support toward those goals</i> - "Through conversations and getting to know what they care about and then getting to know them as people." (Nigel, YDP)</p>	<p>Players who seek out information and readily uses the resources around them to learn and develop</p>
	<p><i>Prescribe goals and plans for players to work toward</i> - "We try to break down the long journey, looking at smaller goals. That helps to step things out and ensure that there's targets there for players to work toward." (Pat, PDP)</p>	<p>Players will set goals that match their annual learning plan across training and games</p>
	<p><i>Readily question players on their goals, performances, and challenges they may face</i> - "We ask [players] 'why are you here?' ... the main answer might be, 'I'm here today because I want to get better at this part'." (Lloyd, YDP)</p>	<p>Driven players will communicate effectively with team mates to achieve goals</p>
	<p><i>Encourage players to create their own goals and independently work toward achieving them</i> - "Through conversation and analysis players take those experiences and it allows them to create the evidence they need to set their own goals relating to their current needs." (Nigel, YDP)</p>	<p>Players understand their strengths and weaknesses, set own goals, and have ownership over development</p>
	<p><i>Support players toward longer term goals by maintaining focus on it over time</i> - "Constantly trying to relate long-term goals to what players are doing now for perspective." (Lloyd, YDP)</p>	<p>Players who complete the PMA reviews</p>
	<p><i>Encourage players to independently review their performances</i> - "Putting emphasis on self-reflection and using things like, 'what do you need to keep doing, start doing, stop doing?'" (Jim, YDP)</p>	
	<p><i>Use role models to help players in the process of setting and pursuit of goals</i> - "Watching their [players'] peers perform gives them ideas of where they need to be, what they need, and how they might get there ... leads to extra work after training so they've identified something." (Pat, PDP)</p>	

In phase two, discussions on strategies to develop *coping with the demands of high-level sport* led to the construction of five themes (Table 2). These strategy themes centered around the creation of a positive environment that challenges individuals, the

**Table 7.** Strong work ethic: description, strategies, and behavior indicators.

Phase One	Phase Two	
<i>Themes associated to attribute and raw data quote example</i>	<i>Coaching strategy themes and raw data quote example</i>	<i>Behavioral indicators of successful development</i>
<i>Possess the right attitude and work hard - "Attitude to work is probably the highest for me. You think in any walk of life if you've got good attitude to do things well you will succeed." (Edward, PDP)</i>	<i>Coach reinforces good work ethic demonstrated by players - "We [coaches] have to make sure that when it [good work ethic] does happen that it is encouraged and spoken about and praised."(Phil, YDP)</i>	<i>Works physically hard</i>
<i>Serious approach to challenges and overcoming setbacks - "He was going to be on a non-contract he was probably really disappointed as in the back of the head he probably knew he was good enough [to be contracted]; but he came back with that mentality of 'come on then bring it on!'" (Dan, PDP)</i>	<i>Engage players through challenge - "Put an end goal in which links certain constraints in the games or practices ... for example, you have a three-goal lead that must be defended." (Jim, YDP)</i>	<i>Obsessive attitude toward improving</i>
<i>Determination possessed by the best players - "They [players] have an unbelievable desire and self-determination to actually do it [become a professional]." (Aidan, YDP)</i>	<i>Facilitate player autonomy over their development - "There is a coach here on a Tuesday night that they can come in and work with." (Lloyd, YDP)</i>	<i>Attending regularly and being early to training</i>
	<i>Honest communication with individual players - "You'll just make it clear to them [players] that it's [talent pathway] a bumpy road and the reasons why." (Ben, PDP)</i>	
	<i>Practices designed to encourage players to work hard - "Ensuring sessions have tempo, intensity, goals and competition always keeps motivation inherently high and engages people." (Tom, YDP)</i>	
	<i>Promoting self-reflection to highlight areas of improvement - "In player presentations ... they will show us or demonstrate things they are doing outside of these four walls." (Joe, PDP)</i>	
	<i>Reinforce academy culture of possessing a strong work ethic - "We have a saying which is 'nobody works harder than us', it's one of our key fundamental principles." (Callum, YDP)</i>	
	<i>Role modeling of players with strong work ethics - "How they [previous players] did it in this particular session is powerful to encourage hard work." (Pat, PDP)</i>	
	<i>Support players to recognize the bigger picture as a rationale for working hard - "We discuss how they can use the opportunity they've got to progress as far as they can." (Nigel, YDP)</i>	
	<i>Utilize physical data to compare and monitor work ethic - "By the time you're 18, be able to cope with 12 km in a match." (Lloyd, YDP)</i>	

importance of developing this attribute prior to any real-life setbacks, and the need to support players through adverse situations during and after they occur (e.g., orchestrate the support system for players during times of adversity). To prepare players for the intense demands of, and setbacks associated with, competition, participants discussed



**Table 8.** Resilience: description, strategies, and behavior indicators.

Phase One	Phase Two	
Themes associated to attribute and raw data quote example	Coaching strategy themes and raw data quote example	Behavioral indicators of successful development
<p><i>A key attribute which compliments and promotes other psych attributes (e.g., problem solving) - "It's [resilience] an underbelly of their character. If they are resilient then they can communicate with the players and not be afraid to talk to players ... that resilience to carry on because if you don't have that [resilience] it breaks the link and you can't develop further. (Edward, PDP)</i></p> <p><i>Positively and effectively responding to setbacks – "You've got to be robust. You're going into a ruthless business environment that's cut-throat, that's unbelievably competitive and is so unreliable so you don't know what you're going to get from one minute to the next. (Luke, PDP)</i></p>	<p><i>Use players who demonstrate resilience as role models - "You might show them [players] what good looks like or who is good at that [being resilient], nearly every professional footballer has a certain amount of resilience so you have to have that to progress to a certain level." (Joe, PDP)</i></p>	<p>Responding well to mistakes within competition</p> <p>Wanting to get on the ball after a mistake shows resilience</p>
	<p><i>Foster a culture that focuses upon strengths of the players - "Probably by being honest about the standard and quality of actions and non-effective actions, be quite consistent with that, so that they [players] know when they've not hit the standard it's not a big knock to them as people. Give them an understanding of what they need to work on and how their strengths can help them to work on it." (Nigel, YDP)</i></p>	<p>Change negative behaviors into positive ones over time</p> <p>Continuing despite adversity</p> <p>Looks to learn from setbacks or weaknesses</p>
	<p><i>Allowing players to respond independently to setback before intervening - "If you can ask direct questions that will help players remember what the problem is and how they might solve it and then they get the chance to go and practice that next time the problem comes along, they have built some resilience or built some tools to use." (Nigel, YDP)</i></p>	<p>Overcome setbacks independently</p> <p>Players are not disappointed for too long</p> <p>Reduction in mistakes during performance</p>
	<p><i>Exposing players to adversity - "Putting them [players] into environment that they are uncomfortable with, in situations that they are uncomfortable with I'm seeing what response they have to certain situations." (Max, YDP)</i></p>	<p>Work hard to improve after setback</p>
	<p><i>Provide players with open and honest support - "Withdrawing your [own] emotion out of it: calm, explaining the benefits and consequences." (Jim, YDP)</i></p>	

how it was important to manufacture challenging situations (e.g., make it difficult for attacking players to succeed in training drills by overloading the defense) in a controlled manner to give players the experience of managing adversity. Although creating challenges was deemed necessary to prepare players for senior soccer, participants were clear that they would differentiate their support for players throughout any form of adversity, simulated or not. One strategy highlighted as an approach to supporting players through adversity (e.g., deselection; injury) was the use of honest conversations, during which emotionally controlled and frank discussions could take place. Participants also highlighted the importance of providing players with clear actions to improve their performance and solve problems (e.g., how to return to the starting lineup if they had been deselected). Once developed, participants reported that a player should be able to regulate their own progress, possess an ability to positively adapt to demands, and effectively manage highly competitive situations. When describing the behaviors that would suggest a player has developed this attribute, participants highlighted the ability to

demonstrate adaptive behaviors during demanding situations (e.g., positive body language following a loss of possession). Further, participants described how players with this attribute are likely to seek out coaches to gain information on how they can improve in the face of challenges and/or setbacks.

### **Self-awareness and self-reflection**

Described as *a player's ability to be conscious of their own development and readiness to reflect upon their performance*, participants outlined the need for players to be self-aware and self-reflective. From discussions with participants in phase one, a key characteristic of this attribute is a player being forthcoming and active in their self-reflections, and ready to develop their weaknesses (see Table 3). In phase two, participants suggested actively promoting players' self-reflection and awareness through designing practices that involve multiple stimuli and for it to be delivered in a style that incorporates questioning. Participants also recommended the use of technology, such as the Performance Management Application (PMA) and video footage, to prompt players to become more aware of, and then reflect on, their own performance. How the environment is structured, specifically the design of the training session (e.g., promoting autonomy), was viewed as an important strategy toward the development of this attribute. According to participants the practice must make players aware of their capabilities with reference to the aim(s) of the session and provide opportunities for concurrent feedback on their performance. In many instances, it should be the coach who provides that feedback. Such one-to-one interaction with players was a valued feature of a players' psychological development amongst participants, recognized as an opportunity to strengthen their relationship with the player and talk more freely (without judgment from others) about areas of development. Once this attribute is developed, participants suggested that players will show a willingness and urgency to gain information whilst they also will be more forthcoming with their own analysis.

### **Emotional control**

The attribute *emotional control* was constructed through participants' beliefs that players must *manage their own emotions during challenging situations*. Our participants highlighted the importance of an academy player developing this attribute to manage a wide range of possible emotions that accompany the different demands that they experience during their personal and professional developmental journey (see Table 4). To facilitate the development of emotional control amongst academy players, participants in phase two recommended strategies that require strong interpersonal skills (see Table 4). Coaches suggested that during times of duress (whether real or manufactured) a coach should use their knowledge of the player to provide them with calm, constructive, and considerate support to help the player become aware of their emotions and to respond appropriately. Additionally, it was noted that in some circumstances players require space and appropriate distance from the demanding event before being given support, with the aim of lowering the intensity of a player's emotions from a heightened state following the situation that caused it. The dialogue with participants on this matter provided insight into how a coach needs to engage in continued reflection (i.e.,

determining the best approach) during situations of heightened emotion to master the art of supporting a player's development of their emotional control. To gauge whether support is required, according to participants, a player who has developed emotional control would be observed to demonstrate control and focus during emotionally charged situations without support from the coach.

### **Confidence**

*Confidence* was constructed as a key attribute as participants detailed how it is an influential attribute that impacts player behaviors, performance, and other psychological attributes (see Table 5). It was defined as *a player's self-belief in their competence, across different situations, such as training or competition with the best players possessing a robust belief that is stable across time and different situations*. Phase one participants discussed the additive effect confidence can have on behaviors and other psychological attributes indicating that confidence will influence players' attempts to try new technical skills with low confidence potentially inhibiting creativity. Phase two participants identified several strategies to support the development of confidence (see Table 5). Confidence is supported through the focus on previous accomplishments and strengths alongside the provision of opportunities for frequent success and allowance for player autonomy and freedom. Therefore, making players aware of and then improving their strengths was recognized by participants as a key antecedent of enduring self-confidence. Additionally, participants recommended that a players' strengths are continually emphasized to create positive interactions between player and coach. The participants did not just believe players should solely focus on their strengths, however. They also discussed the importance of allowing players to try new things without being inhibited by any fear of failure. According to phase two coaches, at this point, the role of the coach is to guide players' exploration and to give them opportunity to experiment before intervening.

Participants also distinguished between behaviors that indicate a player has high confidence and those that suggest a player may have low confidence (see Table 5). Noticeably, players with high confidence will readily, and effectively, interact with others (e.g., teammates) and will continually work hard, uninhibited by fear. In contrast, low confidence players are less likely to interact with others and will struggle to cope with setbacks, often being further constrained by a fear of making mistakes. Confident behaviors, although not limited to the pitch, are often demonstrated within competition or practice making this type of environment the most appropriate for coaches to gauge a player's confidence.

### **Driven to achieve goals**

The attribute *driven to achieve goals* was developed through participant views concerning the importance of goal-driven behaviors and was subsequently defined as *possessing a high level of acceptance, engagement, and drive toward achieving personal goals*. Strategies to develop a player's drive to achieve goals were distinguished by those that supported the player to set goals and those that help players during the process of achieving those goals (see Table 6). Coaches in phase two recommended the use of role

models to help encourage players to create their own goals, but also suggested that prescribing realistic goals for their players was helpful in developing this attribute. Providing an opportunity and a platform to create and discuss goals was deemed a valuable strategy and one that scaffolded the planning and pursuit of their goals. To support players' pursuit of goals, participants highlighted the need for an individualized approach and for the concurrent review of targets to maintain a player's focus on achieving them. Having knowledge of the player, and what matters to them, was considered an important feature of developing this attribute. Participants went on to suggest that players who possessed a drive to achieve goals would know their strengths and weaknesses and continually apply themselves to their goals and goals created for them (e.g., aims of the session). Thus, players who actively pursued their goals were recognized as having developed this attribute.

### **Strong work ethic**

A *strong work ethic* was recognized as an integral feature of a successful players' psychological repertoire (see Table 7). Players with a strong work ethic have *a positive attitude toward working hard coupled with a determination to achieve and remain within professional levels of soccer*. An attitude to work was revered by participants with the attribute associated with a better chance of success, making this characteristic a valuable addition to an academy player's attributes as they compete against others in their squad for professional contracts.

A strong work ethic can be supported by the coach in several ways (see Table 7). The delivery of physically challenging and engaging practices, and the reviewing and monitoring of physical data, contributes toward a culture that prides itself on hard work. To create such a culture, participants talked about the need for consistent messages through the setting of expectations. It was suggested that setting clear expectations serves to uphold the quality of performance as well as some of the off-field traditions for academy players (e.g., changing room cleaning rota) designed to maintain humility as they begin to gain financial rewards for their performance. In the modern-day soccer academy, it is commonplace for technologies to be used to support performance. The use of global positioning system (GPS) devices was recommended by coaches to facilitate effective monitoring and comparison of players' work ethic; objective (and therefore unbiased) data that players can benefit from knowing too. Phase two participants also highlighted how players with a strong work ethic have a tenacity to learn. Participants explained how preparing for action is central to this attribute, with part of the preparation to utilize the coach to gain information. Once information is obtained, players with a strong work ethic will then evidence this attribute during competition. A strong work ethic is, therefore, not just the planning or willingness to act, it is the execution of self-sacrificing behaviors that enhance the performance of the team.

### **Resilience**

Constructed through participants' views that players need to be able to respond positively to setbacks (i.e., sustain performance, adapt to circumstances), prepare for

future difficulties (i.e., protect themselves from the potentially harmful effect of stressors), and have a foundation to cope effectively (i.e., demonstrate *coping with the demands of high-level sport*), *resilience* was identified as a standalone attribute (see Table 8). Indeed, resilience was described as *an attribute that compliments and promotes related psychological factors (e.g., problem solving; coping), which supports players' positive approaches, and responses to, setbacks and challenges of the academy*. Throughout phase one interviews, coaches widely discussed how academy soccer is challenging, with many demands placed upon players. The non-linear path toward becoming a professional was recognized by participants, along with the role that resilience plays throughout a player's journey. To enhance resilience (see Table 8), coaches in phase two suggested fostering a positive environment whereby players are readily exposed to adversity but with the coach there to provide an open and honest support system when necessary. In particular, the participating coaches focused on strategies that emphasized building the cognitive processes that would support a player to become more resilient and overcome isolated setbacks or challenges. Questioning techniques were thought to help players to problem solve during times of challenge or adversity. In instances where questioning may not be appropriate, it was recommended that coaches would need to offer direct constructive feedback, but to buffer what could be a negative experience, it was also advised that players should be provided with a rationale for why such feedback on player behavior is important.

Once developed, coaches reported that they should be able to observe behaviors associated with resilience (Table 8), including positive responses to mistakes or setbacks with the player demonstrating greater levels of persistence even during times of adversity. The player will also be more positive, generally, and not be disappointed for too long after a setback but rather concentrate energy on improving ready for the next competition. In competition, the intent from players to continue to want the ball, despite a mistake, was recognized by participant coaches as a key indicator of resilience.

## Discussion

In phase one of this study, we explored professional soccer coaches' perceptions of the psychological attributes that give players the best opportunity to perform and progress through academies and into professional soccer. Subsequently, we constructed eight distinct attributes through RTA: commitment to develop; coping with demands; self-awareness and reflection; emotional control; confidence; drive to achieve goals; work ethic; and resilience. Following this, in phase two, we aimed to identify coaching strategies that support the development of these attributes, as well as the adaptive behaviors that indicate whether a player has successfully developed the attribute. Analysis of interviews with a different sample of professional soccer coaches led to a range of coaching strategies being identified, offering academy coaches an understanding of how they may support their players' psychological development. Alongside coaching strategies, our results also offer behavioral indicators that may suggest an attribute has been developed within a player; information that can help coaches regulate the psychological development of individual players.

Our findings consolidate, in-part, previous assertions as to the most important psychological attributes to develop in elite youth athletes, with each attribute having been cited in literature previously to differing extents. For example, Dohme et al.'s (2019) scoping review of psychological characteristics within youth sport literature presented several attributes that resemble those identified in the present study (e.g., hard-work ethic, emotional control, realistic self-evaluations, confidence, and resilience), whilst other examples of inductive research have presented similar attributes to *drive to achieve goals* (e.g., Gould et al., 2002), *commitment to develop*, and *coping with the demands of high-level sport* (e.g., MacNamara et al., 2010). In Dohme et al.'s review, resilience was presented as a distinct attribute, whilst *coping* was deemed a behavior that facilitates *emotional control*. In our study, emotional control and coping were distinguished because coping was considered as the ability to achieve adaptive emotional, cognitive, and behavioral responses that facilitate players' abilities to manage demands and potentially thrive in challenging situations (cf. Brown et al., 2017), rather than the control of emotional responses alone. Accordingly, aligned to Sarkar and colleagues' (2014, 2020) conceptual understanding, we also distinguished resilience from coping. Indeed, psychological resilience is considered a personal resource that helps to "protect an individual from the potential negative effect of stressors" (Sarkar & Fletcher, 2014, p. 1420). Resilience does not, therefore, result in positive adaption (like the ability to cope) because it refers to the ability to maintain, rather than restore or enhance, functioning under pressure (Sarkar & Page, 2020).

A strength of our findings lies with *who* constructed them (i.e., the academy coach) and the context for which the psychological attributes were being proposed: for youth players to perform and progress through an EPPP-governed soccer academy toward the senior game. The modern-day academy environment is a moving entity, meaning that the demands that players experience regularly evolve. Thus, up-to-date knowledge of the psychological requirements for players is crucial to providing current and contextualized support for them (Daley et al., 2020; Mitchell et al., 2022). Universal approaches to identifying the important psychological characteristics required for success across sports have been criticized for not being malleable to the contextual demands of different situations (Anthony et al., 2018). Our findings provide greater direction for the psychological support within academies and can give practitioners some confidence that the identified psychological attributes will contribute positively toward a player's development and progression toward the professional game.

Many of the psychological attributes outlined in the EPPP (e.g., lifestyle management, focusing, imagery) did not explicitly materialize from the analysis of our data. Although these attributes may have overlapping themes with the attributes we identified, the absence of these terms in phase one interviews would suggest an incongruence between (and potentially a lack of value placed upon) the policy that guides the psychological development of academy players and the actual psychological requirements for players. Although the EPPP may have intended to give academies autonomy over the psychological provision they provide, the lack of guidance inadvertently communicates a lack of value for the provision, potentially contributing further to its lack of integration in comparison to other areas of sport science (Kelly et al., 2022). Given the purpose of this project was to ascertain the key psychological attributes required of academy soccer

players the findings of phase one may, therefore, help inform the EPPP as it adapts and aligns to the changing psychological demands of the modern-day soccer academy.

To support coaches in developing the eight attributes, in phase two of this study we identified 55 general strategies (themes) that can be employed by the academy coach. Some of these strategies have been cited before within the literature (e.g., facilitating goal setting, Mitchell et al., 2022; encouraging positive behaviors, Harwood, 2008; promoting or demonstrating model behaviors, Kitsantas et al., 2018), whereas others add to our knowledge surrounding the psychological development of academy soccer players. The identification of strategies similar to those cited in previous literature is a useful finding, suggesting that coaches may have a better understanding of sport psychology than previously indicated (Pain & Harwood, 2004). For example, eight strategies were constructed as means to develop confidence, several of which closely resemble the strategies that were previously suggested by participating sport psychologists in Beaumont et al.'s (2015) study as ways to develop "robust" confidence (e.g., exploring sources of confidence, reflecting, modeling vicarious experiences, developing athlete's signature strengths). The participant coaches in our study also provided strategies that aligned to Harwood and Anderson (2015) eight principles of developing psychological attributes through coaching: PROGRESS (e.g., promotion of the attribute; role model the attribute; ownership over decisions). The overlap of strategies between those recommended in previous literature (e.g., Beaumont et al., 2015; Harwood & Anderson, 2015) and those in the current study supports the notion that knowledge held by elite youth coaches is of value, reinforcing the argument that coaches should have greater involvement in the construction and implementation of psychological support in academies. Further, by prioritizing coaches' opinions and preserving the language they used we have presented contextualized guidance for other academy coaches, which may help application, and in turn, may contribute toward changes in coaching behavior (cf. Anthony et al., 2018).

Currently, academy coaches appear to be in an equivocal position when it comes to the psychological development of their players; available and willing yet lacking the direction and catalysts to drive their behavior change. Arguably, many coaches find themselves in this position, in-part, due to insufficient formal and informal coach education relating to the psychological development of youth soccer players (Freitas et al., 2013; McKay et al., 2021). The coaching strategies outlined in the present study can serve to negotiate the milieu of issues inhibiting academy coaches' learning and their abilities to develop their players' psychologically. For example, coaches can (a) review the psychological attribute(s) they wish to promote within their curriculum (e.g., *emotional control*); (b) integrate associated strategies within their session plans where applicable (e.g., *fostering competition and challenge* would require a practice with opportunities for success and failure); and (c) actively look for opportunities to, and readily apply, strategies to support the attribute during practice (e.g., *get players to focus on their strengths and set goals during times of heightened emotions*).

Elucidating coaching strategies to successfully develop the psychological attributes may offer academy coaches parameters for their role in the psychological development of players (Anthony et al., 2018). For example, whilst evaluating their sport psychology coach education program to a high-level fencing and soccer coach, Feddersen et al. (2021) found that the coaches struggled with knowing the parameters of their role

regarding sport psychology. Specifically, the participating coaches were unsure when to refer athletes to the sport psychologist and were cognizant of abusing trust within the coach-athlete relationship. Focusing upon the behaviors identified in the present study may help reduce this perceived grey area for coaches and provide clear parameters for their role in the holistic development of the player (see EPPP). Thus, coaches may want to accustom themselves with the observable behaviors associated with the attributes they intend to develop so that they can more readily provide positive feedback to players when the behaviors are observed (Mckay et al., 2021).

Knowledge of the behavioral indicators of a developed attribute can serve to support a coach in their observation of players and future employment of strategies. For example, recognizing there had been few advancements in the development of mental toughness, Anthony et al. (2018) employed a coach education program that aimed to increase the frequency of mentally tough behaviors amongst athletes. Through a series of workshops and observations, Anthony et al. supported coaches to identify and promote mentally tough behaviors in their athletes. Anthony et al.'s decision to get coaches to focus upon the observable behaviors rather the unobservable features of a mentally tough athlete was supported by the success of their intervention and the outcomes of previous behavioral coach education programs in sport (see Theeboom et al., 2014), highlighting the merits of knowing the behavioral indicators of developed attributes. Indeed, Harwood (2008) also adopted a behavioral approach when educating academy coaches on the 5Cs, reporting an improvement in coach efficacy as a result. Like Anthony et al.'s and Harwood's coach education programs, our findings can be used as a framework to guide and mobilize informal learning for academy coaches on the topic of developing psychological attributes in players (e.g., peer observations or observation feedback).

### **Limitations, future directions, and conclusion**

Our qualitative exploration provided the opportunity for academy coaches to share their opinions on the psychological development of academy players, an opportunity seldom offered within this area of research (Gledhill et al., 2017). Although our findings may be useful to the academy coach, we recognize that they are contextualized to the optimal environments of a modern-day soccer academy and thus may not capture all psychological attributes associated to youth soccer success. To enhance the utility of our findings, researchers may wish to also adopt naturalistic methodologies to explore different academy environments or those of a different EPPP categorization. Further, greater understanding of the additive or complementary effects of attributes on one another could help practitioners prioritize their development and, linked to this, researchers may wish to align the coaching strategies to stages of maturation and critical periods of transition within an academy, to refine their implementation. Beyond the affirmation of psychological attributes, researchers could also look to assess the effectiveness of the coaching strategies suggested in phase two by reviewing coaches' efficacy in their application or by measuring academy players' psychological development in response to the employment of the coaching strategies (see Harwood, 2008; Harwood et al., 2015). With the challenges of embedding psychological support into soccer academies, both sport psychology literature (theory) and youth soccer academies (practice) would benefit from



research that aims to apply the coaching strategies in situ. Supporting coaches to apply strategies is integral to the psychological development of players and, although challenging, researchers should direct attention toward the academy coaches' application of psychological knowledge.

The psychological capabilities of a youth athlete are recognized as being a crucial contributor toward a successful progression into professional sport (Daley et al., 2020). This study extended and added significantly to the extant literature in the area of the psychological needs of youth soccer players primarily through focusing upon the opinions of academy coaches, a surprisingly underrepresented sample in literature that concerns soccer player's psychological development (Gledhill et al., 2017). Further, our research identified the desired psychological attributes of players to give them the best opportunity perform and progress through academies and into the professional game, as well as identifying coach strategies to support the development of each psychological attribute whilst also providing a profile of behaviors that would indicate a player has developed (or is developing) a specific attribute. These insights can help practitioners gauge the effectiveness of their strategies and their player's current psychological capabilities. Although this knowledge is valuable, further research is needed, however, to substantiate the use of these strategies and the impact of the attributes being developed. Nevertheless, coaches are encouraged to employ the identified strategies to develop the psychological attributes within their own players.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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