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# The importance of contextualisation when developing pressure intervention: An illustration among age-group professional soccer players

Sofie Kent, Tracey Devonport, Andrew Lane, & Wendy Nicholls

University of Wolverhampton  
United Kingdom

Correspondence: [s.kent4@wlv.ac.uk](mailto:s.kent4@wlv.ac.uk)

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The need for interventions that help adolescents cope with pressure is widely recognised (Yeager et al., 2018). However, a recent systematic review indicates that contextualising the pressure intervention is often overlooked (Kent et al., 2018) which likely detracts from intervention effectiveness. The focus of contextualisation is to identify from the perspective of intended intervention recipients, pressure-inducing incentives, and factors factor facilitative and debilitating of performance under pressure. The present case study illustrates a process of contextualisation among age-group professional soccer players. Thirty-two male academy soccer players (11–12 years,  $n = 8$ ; 13–14 years,  $n = 8$ ; 15–16 years,  $n = 8$ ; 17–18 years,  $n = 8$ ) participated in one of eight focus groups. Informed by Baumeister and Shower's (1986) definition of pressure five situational and two personal incentives were deductively identified. Fletcher and Sarkar's (2012) model of psychological resilience was used to identify perceived protective and debilitating factors of performance under pressure. Supporting contextualisation, recommendation for integrating the identified incentives and protective factors into a pressure training intervention are presented. The resultant understandings are also of value to those working with adolescents.

**Keywords:** appraisal; coping; intervention development; resilience; stimulation training

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Pressure may exert effects on performance through a variety of psychological (e.g., anxiety and effort) and physiological (e.g., muscle activity) pathways (Cooke et al., 2011). Adolescence is a period categorised by many psychological, psychosocial, and academic pressures (Wylleman, et al., 2013). The significant changes in metacognitive development during adolescence can impact upon the appraisal of pressure and adaptive coping (Yeager et al., 2018). Adaptive coping is a result of an individual being able to effectively modify coping behaviour according to the context of each situation. Moreover, there is a great value in generating contextualised and theory-guided coping interventions so adolescents can learn to adaptively cope through developing a broad spectrum of individualised strategies for optimal performance.

The present study uses the pressurised context of academy age-group soccer to illustrate how better understanding the experiences of adolescents with regards to pressure and its management can be constructively used to inform intervention development. Contextualisation encompasses the physical, social, and cultural features of the immediate setting and has been emphasised by Gucciadi and colleagues (2008) to be imperative for optimising the effectiveness and suitability of interventions. There are an estimated 12,000 adolescent male academy soccer players aged between 11 and 18 within Premier League academies (Conn, 2017), alongside the developmental pressures of adolescence, players are part of a competitive learning environment that places high demands on performance development in the short and long-term (Nerland & Sæther, 2016).

For conceptual clarity, Baumeister and Showers (1986, p.362) defined pressure as ‘the presence of an incentive or number of incentives that increase the importance for optimal, maximal, or superior performance’, a definition adopted in the present study. The author recognises conceptual similarities with stress and pressure, whereby an appraisal process is a mediator of emotion which can have an influence on performance. However, they are conceptually distinct in that stress results from a perceived ‘substantial imbalance between environmental demands and response capability... that may have valence for well-being.’ (Lazarus & Folkman, 1986, p.19). In contrast, performance pressure results from an individual’s appraisal of the presence of meaningful incentives that increase the importance to perform optimally (Baumeister & Showers, 1986). An individual may experience pressure during a sport competition (incentive of single performance opportunity) where there is an audience of friends, family, and other athletes (incentive of esteem and pride), and with opportunity to win a place in a prestigious team or club (reward incentive). The same individual may experience stress where they perceive that the requirements of this competition (demands) exceed their ability (response capability), with failure carrying important consequences (valence). It is important to distinguish between stress and pressure as it can lead to different aims and objectives for interventions (Crown, 2015).

The cognitive-motivational-relational (CMR) theory of emotions (Lazarus, 1999) has been utilised as the theoretical basis for some pressure interventions and delivered in a range of pressure contexts including sport (Olusoga et al., 2014) and education (Jamieson et al., 2016). This theory proposes that primary and secondary appraisals associate with the specific emotions (and intensity) experienced, as well as the behavioural responses that influence performance. Primary appraisal refers to evaluation of the significance of an event, whereas secondary appraisal represents an evaluation of the coping strategies that individuals have at their disposal.

In order to synthesise existing knowledge Kent and colleagues (2018) conducted a systematic review of published coping-pressure interventions. This systematic review identified that coping-pressure interventions have been delivered through methods of cognitive-behavioural (CB) workshops, simulation trainings, psychology consultancy sessions, and emotional regulations strategies. Of the named interventions, simulation training (ST) integrated with CB workshops presented the most effective means of enhance performance under pressure (Kent et al., 2018). ST typically involves practice in the presence of simulated pressure (Jones & Hardy, 1990). The degree to which the

simulation replicates reality is known as fidelity; effective ST acts on the principle of presenting high levels of psychological and physical fidelity (Hamstra et al., 2014). In order to obtain high fidelity, simulation should incorporate exposure to meaningful pressure which provides recipients with opportunities to develop broad, flexible, and contextually-relevant coping strategies (Bell et al., 2013). The systematic review argued that many published pressure interventions present low fidelity due to the lack of contextualisation (Kent et al., 2018). For example, Beauchamp and colleagues (2012) developed an ST and CB workshop programme delivered to the Canadian national short-track speed skating team. This was intended to enhance sport performance under pressure of the Olympic Games. The ST of the short-track speed skating performance incorporated incentives of crowd noise and pictures of the performance venue. However, this intervention did not include other known incentives that will have increased fidelity and resultant pressure. For example, rewards or punishment based upon level of performance, observation from an evaluative audience, and environmental conditions (track, temperature, and altitude) (Baumeister, 1984). Aligned with CMR theory, the absence of meaningful incentives may not generate appraisals of importance, undermining the purpose of ST (Lazarus, 1999). Understanding pressure from the perspective of intended intervention recipients – in other words contextualisation – should be the first stage of pressure intervention development (Baumeister et al., 2007). Researchers and applied practitioners must identify incentives perceived as pressure-inducing among the target population, with the intent of creating/recreating them during ST, thus creating high fidelity.

Often adjunctive to ST are CB workshops with address psychological skills such as relaxation, attention strategies and re-appraisal for application during simulation (e.g., Bell et al., 2013). However, the appropriate content of CB workshops may vary by context. For example, relaxation strategies are deemed useful for surgeons who require low heart-rate variability and low physiological arousal in order to execute fine motor skills when undertaking lifesaving or enhancing operations (Wetzel et al., 2011). In contrast, police officers may wish to elevate physiological arousal for sharp-reactions in pressurised contexts (Nesse & Ellsworth, 2009). Fletcher and Sarkar's (2012) grounded theory of resilience offers a useful framework in contextualising psychological factors that elite athletes perceived to help perform optimally under pressure. Such framework provides factors that should be accommodated in the development of CB workshops adjunctive to ST.

The aim of the present study was to identify incentives that increased the importance of performing well among male youth academy soccer players. This was intended to increase the fidelity of subsequent ST interventions. A secondary aim was to establish factors perceived by players to be protective or debilitating of coping with performing under pressure. This study illustrates contextualisation and identifies why it is a necessary step for any individual undertaking research or applied work in pressure and its management.

## METHOD

### Research context

Pragmatism is a philosophy of knowledge construction that emphasises practical solutions to applied research questions and the consequence of enquiry (Giacobbi et al., 2015). A pragmatic viewpoint was adopted because the purpose of this study is to offer researchers and practitioners integrated approaches to knowledge construction for performing under pressure interventions for academy soccer players (Giacobbi et al., 2015). A case study was undertaken within the male Premier League, category one soccer club (24 soccer clubs out of 84 within the UK have achieved this status). This approach offered a structured way to disseminate 'real life' experiences of pressure across academy age groups aligning with the pragmatist approach of this study (Keegan et al., 2017).

## Development of the interview guide

The semi-structured questions were designed with the aim of gaining a greater understanding of soccer players' experiences of pressure. The interview commenced with a rapport building introductory question to initiate discussion and preface the topic (e.g., *Could you tell me a little bit about your playing experience?*). Incentives that induced pressure was then explored by asking players about playing under pressure (e.g., *How important do you think it is to be able to perform under pressure? Could you describe to me what you think pressure is? What makes it important in that situation to perform? Is there anything that coaches could do increase pressure?*). To continue, an examination of factors that may protect or debilitate performance under pressure, (e.g., *What can help you prepare to perform under pressure? What do you think about when under pressure... Is this helpful?*), and distancing techniques were also used (e.g. *Can you describe a player that handles pressure well. What do you think they were thinking and feeling?*) Clarification and elaboration probes (e.g., *Could you tell me about...*) were used to add depth and clarity in players' responses (Woodman & Hardy, 2001).

The interview schedule was piloted with a women's super league player (the top tier of women's soccer in the UK) to review questions for comprehension and acceptability. This led to the researcher simplifying language used in the interview guide. As an illustrative example, the question, '*What degree of importance do you give to being able to perform under pressure?*' was amended to '*How important do you think it is to be able to perform under pressure?*'.

## Participants

The Premier League delivers a development system across three phases of adolescence: Foundation (11–12 years, Youth Development (13–16 years), and Professional Development (17–18 years) (Premier League, n.d.). Purposeful sampling was used for the identification and selection of information-rich cases related to the phenomenon of interest; in this instance the perceived pressures in maintaining an academy soccer lifestyle and associated demands (Palinkas et al., 2015). Players were purposively selected to participate in focus groups on the basis that they perceived different experiences of pressure. To support this objective, all academy players completed the five-item pressure/tension subscale from the Intrinsic Motivation Inventory (IMI; Deci & Ryan, 1994) (e.g., '*I felt the tense while performing?*') and item responses were averaged to provide one pressure/tension score. This inventory has been previously used in this way to evaluate perceived pressure (e.g., Balk et al., 2013).

The two highest (most likely to experience pressure i.e., with score > 6) and two lowest (least likely to experience pressure i.e., with score < 2) scoring players from each category (e.g., age 11, 12, and 13) were selected to participate in focus groups. This resulted in thirty-two male academy players (see Table 1) participating in one of eight focus groups, with participants grouped according to age category. Experience of academy soccer among focus group participants range from six months to 10 years ( $M = 6.34$ ,  $SD = 8.87$ ).

Table 1

*Focus Group Demographics for Academy Players*

Focus group	Age range	Number of players per category	Years' experience	IMI pressure score (high)	IMI pressure score (low)	Contract type
1	11-12	Age 11 = 4	$M = 3.82$	Defenders ( $n = 1$ )	Defenders ( $n = 2$ )	Part-time ( $n = 3$ )
		Age 12 = 4	$SD = 1.27$	Midfielders ( $n = 2$ )	Midfielders ( $n = 1$ )	Full-time ( $n = 5$ )
2	13-14	Age 13 = 4	$M = 3.75$	Strikers ( $n = 1$ )	Strikers ( $n = 1$ )	
		Age 14 = 4	$SD = 2.48$	Defenders ( $n = 3$ )	Defenders ( $n = 1$ )	Part-time ( $n = 2$ )
3	15-16	Age 15 = 4	$M = 4.02$	Midfielders ( $n = 1$ )	Midfielders ( $n = 2$ )	Full-time ( $n = 6$ )
		Age 16 = 4	$SD = 2.86$	Goalkeeper ( $n = 1$ )	Goalkeeper ( $n = 1$ )	Part-time ( $n = 2$ )
4	17-18	Age 17 = 4	$M = 6.25$	Defenders ( $n = 1$ )	Defenders ( $n = 2$ )	Full-time ( $n = 6$ )
		Age 18 = 4	$SD = 3.14$	Midfielders ( $n = 2$ )	Midfielders ( $n = 1$ )	
				Goalkeeper ( $n = 1$ )	Defenders ( $n = 1$ )	
				Defenders ( $n = 1$ )	Midfielders ( $n = 3$ )	Full-time ( $n = 8$ )
				Midfielders ( $n = 2$ )		

## Data collection procedure

Ethical approval was granted by the University of Wolverhampton ethics panel before data collection. The sample represented a category one academy squad and thus showed significant external validity in a population which is small and difficult to access. Access to this squad was granted with permission and support of the academy manager (therefore representing a convenience sample). For players under 16 years of age, parents were informed of the aims of the present study and invited to offer consent for their child's involvement. For all players, informed consent to participate (in addition to parental consent as appropriate) was sought. However, for ethical reasons, it was made clear to all players and their parents/guardians that participation and any information gained as part of the study would have absolutely no impact on their squad or contractual selection. It was also made clear that they could decline participation without consequence. No inducement was offered to the players for their participation, other than the explanation that participation within this study could assist in developing an intervention to aid performance under pressure. No players declined the opportunity to take part.

Focus groups were undertaken with players enabling participants to reflect on and discuss differing or similar experiences and perspectives (Côté-Arsenault & Morrison-Beedy, 2005). All focus groups were completed in a quiet office at the academy training ground during the morning training hours of the academy.

Within a high performance sporting environment, participants may have concerns about disclosing negative experiences of pressure for fear of undesired consequences. To reassure participants of anonymity, players were informed before interviewing that pseudonyms were used in reporting data and illustrative extracts were used from across the participant pool. Interviews were transcribed verbatim with players receiving a copy of their transcript to add, amend, or omit their comments as deemed necessary to accurately reflect their participation and experiences (Miles et al. 2016). One player made an addition to their transcript to include incentive of social media.

## Data analysis

Thematic analysis (TA) was conducted to explore players' perception of their pressure experience and presents a tool for enquiry that foster positive practices (e.g., development of ST) from the 'in situ' data (Hobson, 2006). TA can be an adaptable and flexible methodology allowing the researchers to utilise a pragmatic position for the detection, analysis, and reporting of themes in data (Braun & Clarke, 2006). The varied application of TA by researchers who may have different paradigmatic and epistemological positions make it important to clarify the approach utilised within this study. This helps to minimise inconsistencies and a lack of coherence when developing themes from research data (Braun & Clarke, 2006).

TA was conducted to explore players' perception of pressure-inducing incentives and factors that may protect or debilitate coping under pressure from the 'in situ' data (Hobson, 2006). Braun and Clarke's (2006) method of TA was used to identify, organise, evaluate, and reports pattern within the data. This followed a six-step approach; first, interview transcripts were read and re-read by the author to ensure clarity and understanding of participant meaning; then began the second phase of producing initial codes from the most basic segment, or element, of raw data (e.g., competition). The author engaged in self-reflexive practices (e.g., generate notes that contain self-reflective commentary about subjective feeling and sense making of codes) that required the assessment of biases and motivations in a vulnerable, honest, and transparent manner. In the third step, the work of Baumeister and Showers (1986) and Fletcher and Sarkar's (2012) grounded theory of resilience were used to deductively identify themes respectively regarding pressure-inducing incentives and factors protective or debilitative of performance under pressure. Baumeister and Showers' (1986) conceptualisation of pressure was used to

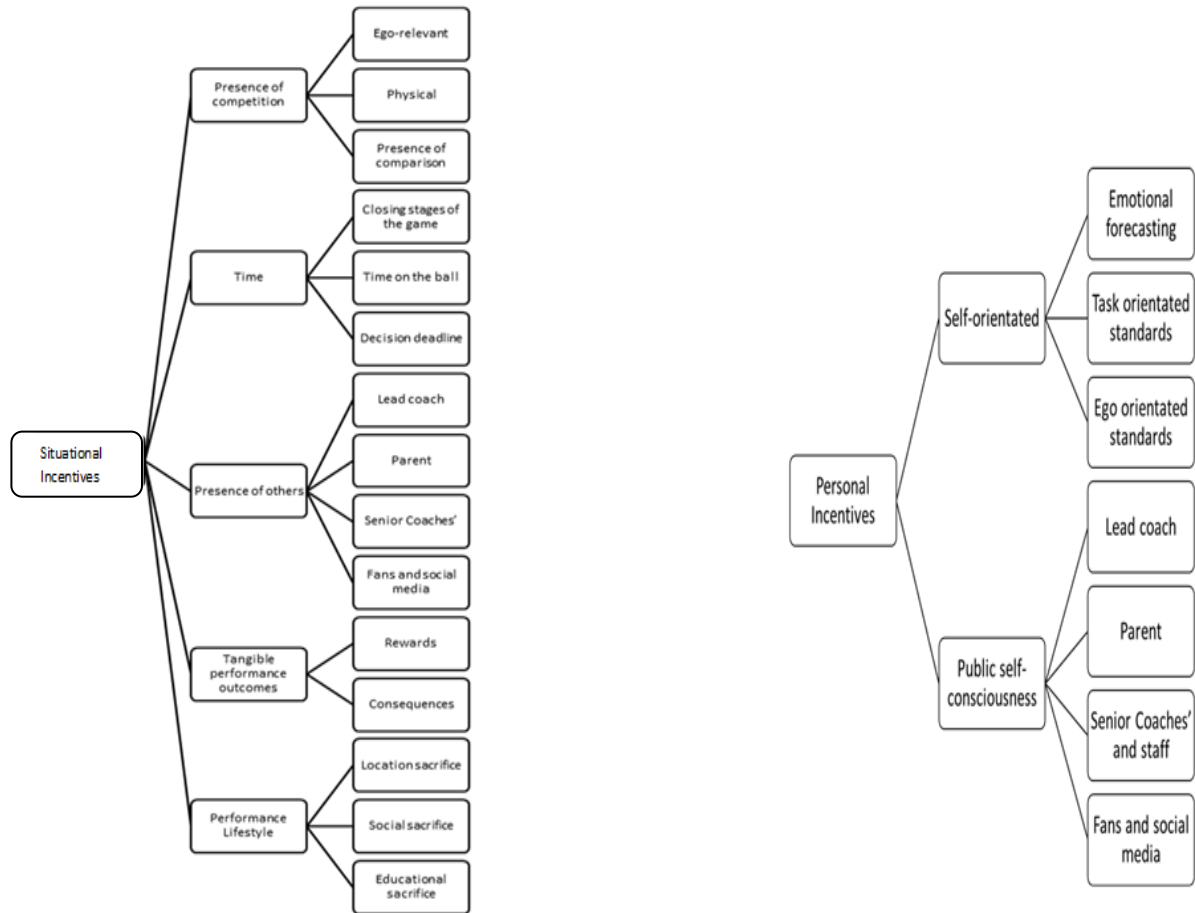
inform the organisation of incentives for optimal performance under two themes: 'situational incentives' and 'personal incentives'. Situational incentives are environmental factors that influence the perceived importance of performing optimally (Baumeister & Showers, 1986). Meanwhile, personal incentives describe the intrinsic contribution to the manifestation of incentives to perform optimally (Mesagno, 2009; Mesagno & Beckmann, 2017).

Fletcher and Sarkar's (2012) grounded theory of resilience was used to organise personal qualities that could be protective/debilitative for superior performance under pressure, under five themes: 'confidence', 'motivation', 'challenge appraisal', 'metacognition', and 'perceived social support'. This ensured there were clear definitions of what each theme was and was not (Braun & Clarke, 2006). Special consideration was given to any with the coded that did not fit within the predetermined deductive themes, however all codes aligned with the deductively determined themes. The fourth step involved refining and reviewing themes to ensure identifiable distinctions between themes, and those sub-themes were appropriately condensed. Following this, to challenge the construction of codes, step five included a 'critical friend'. This critical friend, in this instance the second author, engaged in a process of critical dialogue regarding theme construction and encouraged reflexivity of the first author to increase the trustworthiness of the themes that were constructed (Smith & McGannon, 2018). Step six involved writing up the report by selecting illustrative quotes which the researchers considered as best reflecting each theme.

## RESULTS AND DISCUSSION

Incentives for optimal performance were deductively organised under two broad themes: situational incentives and personal incentives. Situational incentives comprised five sub-themes, while personal incentives comprised four sub-themes (see Figure 1). Psychological factors that were protective or debilitative of performance under pressure were also organised under two sub-themes: protective or debilitative (confidence, motivation, challenge appraisal, metacognition, and perceived social support).

Figure 1  
 Situational and Personal Incentives That Induce Performance Under Pressure Among Academy Soccer Players Aged 11–18.



### Situational incentives

Five subthemes of situational incentives were identified: (1) presence of completion; (2) time; (3) presence of others; (4) tangible performance outcomes; and, (5) performance lifestyle.

#### *Presence competition*

The presence competition captured incentives for optimal performance resulting from players' desire to demonstrate superiority over teammates, opposition, and trialists (players looking to gain a place at the academy). Competitive pressures were often cited as increasing the importance of performing well within contexts of tournaments, derby games (rival academies that are often local) and stadia environments. This is illustrated in the extract below:

Player A (age 13): 'The last time we went to [name of tournament abroad] we had to win this game [semi-final] and we also had to show why we were the first team and beat the other [name of academy reserve team] team which was pressure.'

This finding suggests that, where possible, simulation training for soccer players should take place in environments perceived to be pressure-inducing, such as the club stadium.

With the difficulty in achieving a professional contract, players discussed how their progress could be assessed through comparisons against academy teammates or other academy players. This finding builds on the work of Stoker et al., (2016) who found that although the judgement of teammates did induce pressure, outperforming teammates in training and competition was not cited to be pressure-inducing. Players aged 13–18 years also discussed how outperforming teammates may provide them with the opportunity to ‘play up an age group’ or be in the starting squad for games. Only players aged 11–12 years explicitly noted how younger players promoted from younger age group squads (the under-10 squad) induced pressure to ‘fight for their place’, and to ensure game time.

Finally, the presence of trialists was a contextually unique incentive to the academy environment, whereby players age 15–18 noted ‘more pressure when trialists come in and they are playing for your position, so you have to try even harder.’ This presents a contextual incentive not previously captured within published pressure (Stoker et al., 2016) or soccer stressor literature (Reeves et al., 2009).

Developmental changes experienced throughout adolescence may underpin the ‘what’ or from whom the pressure of competition may manifest from. For instance, during late childhood and early adolescence (ages 11–14 years) a differentiated view of effort and ability begins to occur, using norm-referenced cues to determine success (e.g., win, lose, who is always in the team selection) (Kipp & Meinerz, 2017). However, during middle to late adolescence (ages 14–18 years) as cognitive development leads to a more complex view of the self and perceptions of ability, comparison to others may begin to broaden across physical (e.g., who is the fastest, who is the strongest), social (e.g., who may play up an age group), and academic domains (e.g., highest grade) (Kipp & Meinerz, 2017). Based on these findings, it is recommended that attention is given to the source of competition and the format of pressure training. For example, a format such as a league table would ensure that academy players are able to draw comparisons and compete against each other.

### *Time*

Time was recognised by all players as pressure-inducing incentive comprising of time on the ball, stage of the game, and time to contractual decisions. Time on the ball was a pressure discussed by players as being influenced by the skill level and physical stature of the opposition. Facing skilful or physically mature opposition increased the importance of making quicker tactical decisions and executing more skilful action:

Player A (age 12): ‘If you play a team like [perceived weaker team] you can take on a few players... but against [perceived superior team] your freedom comes down... it’s only one or two touch but sometimes people don’t cope with that and they want to have six or seven touches.’

Proximity of time relative to the closing stages of a match also increased the importance of time on the ball and correct decision making due to the possible influence of errors and threat upon the result: ‘If you don’t keep the ball it might cost you a goal and lose the game.’ For some individuals, time pressure could become a salient threatening stimulus in the environment, evoking anxiety. Anxiety about performing successfully can disrupt performance for motor skills, such as turning and passing due to attentional bias for threat-related materials and distraction from task-related cues (Eysenck et al., 2007). However, if an athlete is able to shift attention flexibly to ensure focus is also on task-relevant stimuli, anxiety can increase effort and performance (Eysenck et al., 2007).

Overall, this study captures how for simulation training to be contextually meaningful it must be performed at an intensity that induces time pressures in ball handling, incorporates competition against players with a greater or similar stature, and comprises performance comparisons (e.g., ranking system) across the squad. This may assist players in learning how to shift attention flexibly to maintain or improve performance.

Proximity of time in respect of 'decision deadlines' for team selection and the awarding of renewed academy contracts were also perceived to be pressure-inducing. Contractual deadlines could evoke worrisome thoughts and varied responses. For some players, anxieties surrounding contract renewal increased motivation to avoid the negative effects of a poor performance. However, for other players, anxiety over contractual deadlines induced rumination over mistakes and 'safety passes' which was not conducive to optimal performance.

In the following focus group exchange, two players discussed concerns regarding contractual pressures and how they may be helpful or harmful performance:

Player B (age 12): 'At the start of the season were doing really well... but then we started to drop because we were thinking about the contract in the next month.. I think we have realised that we just need to believe in ourselves and try our best.'

Player D (age 12): 'Yeah and like [name of coach] had a word with us about like how the contracts happen and [name of other player] stepped his game up massively and started doing more with it, instead of just playing the little short pass he was thinking outside of the box.'

Lazarus (1999; 2000) contends that the meaning an individual ascribes to pressure such as contractual pressures, and the perception of resources to meet the demands of a situation may explain players' varied responses. Where a player perceives sufficient resources (e.g., self-efficacy, control, etc.), the type and intensity of emotion experienced is likely to maintain cognitive function and decreased likelihood of reinvestment (Turner et al., 2013). Time pressure is ever present across many contexts of an adolescent's life, for example, deadlines for coursework, exams, and significant life events. This study highlights the importance of identifying meaningful events that could have 'time deadlines' examining how appraisal, emotions, and coping can influence performance in the build up to these deadlines.

### *Presence of others*

The actual or imagined presence of parents, coaches, senior management, and other individuals (fans, scouts, social media, and media personnel) can induce pressure to perform. Being watched by an evaluative audience was an incentive for players 'because you want to impress them' (Player C, age 16). For some players, the exposure to an audience was beneficial 'because I play better when I am under pressure like when people watch me.' (Player B, age 16). Geukes et al., (2012) discussed how a mild increase in anxiety coupled with effective coping strategies could result in increased effort and perceived success under pressure. However, other players who 'try and not think about it, as it may get you' (Player A, age 15) may fear of negative evaluation from others in which high levels of anxiety can be debilitating to performance:

Player C (age 17): 'If this person was playing in front of a big 500 people crowd and he was having a good game he would be upbeat... But if things started to go bad for him then he would start wanting to kill people... It's like embarrassment and what other people think about him, obviously he wants to impress people.'

Lead age-group coaches could induce pressure during training competition by verbalising performance expectations in both training and completion (e.g., 'He could start shouting like "Come on, you can't miss that!"' (Player B, age 12). Similarly, critical feedback from senior coaches and parents during competition was identified by all players as pressure:

Player D (age 11): 'If you made a mistake like some parents shout at you... and that when the "what ifs" come into your mind, like: "What if I make a mistake, are they going to get onto me. Am I gonna get bring off?"'

Wylleman's et al., (2013) athletic career transition model depicts the identifying transition athletes could face throughout development at five different levels. One significant level is the change of psychosocial support. Specifically, Wylleman's et al., (2013) contend that parental approval is the most meaningful source that may evoke pressure for adolescents up to age 14, where peers, coaches, and parents then become the most salient sources for individuals ages 14–18 years. While one player discussed how 'It used to be [pressure]... and now I'm more mature he's just left me to get on with it.' (Player C, age 15) another player continued to perceive parental pressure-inducing incentives: 'If you have a bad game you just get cussed [negative feedback]... and that is by my dad... it makes me want to play better.' (Player C, age 16).

This study captured how it was often the father that evoked a need to 'play well when is here, but when he is not there, I just play like I normally do.' (Player A, age 12). Within focus group discussions, this study aligned with Clarke and Harwood (2014) who also identified how fathers displayed the most significant verbal reactions to their child's soccer performance (e.g., 'He'd talk me through the game... he'd give me roasting.' (Player B, age 15). 'I wouldn't feel pressure if my mum was there but if day was there I would.' (Player C, age 15)

The presence of a senior coach was discussed by all as significant pressure because of the perceived influence they could have on their academy progression: 'When they [senior coaches] come and watch us because you get a chance to impress and you won't get anywhere if you don't impress.' (Player A, age 15). For players aged 17–18 years, social media exacerbated performance pressures as it presented 'the chance to look good, so if you know it's going to be streamed, you've got the chance to be impressive and for people to know about you.' (Player B, age 17).

Players also discuss how post-match criticism and side-line behaviours of all individuals (coach, senior coach and/or parent) could induce performance pressure in meaningful competition:

Player D (age 14): 'If you don't play well the managers will say you need to raise your game, your parents will say you need to raise your game, and even your teammates will say you have got to do better next time.'

It is important to consider that during adolescent development there is a move from concrete thinking to an increase in concern and analysis of how significant others may value them (abstract thinking) (Acharya & Relajo, 2017; Kipp & Meinerz, 2017). This study suggests that in order to assist adolescents in performing under pressure, they should have the opportunity to engage in pressure tasks in front of an evaluative audience, for example, public speaking in front of peers or family member. By engaging in such tasks, adolescents may learn and develop transferrable coping skills for managing pressure. Specific to the soccer context, training in the presence of key influencers (senior coaches, coaches' parents, and social media), may expose players to elevated levels of anxiety, and provide opportunity to practice and develop more effective coping strategies (Oudejans & Pijpers, 2010). Findings also suggest that audience size and 'importance' of the audience (e.g., parents or senior coaches) should be carefully considered when developing simulation training to induce meaningful pressure.

### *Tangible performance outcomes*

Perceived rewards or consequences associated with performance could induce pressure, namely: contractual incentives, opportunities for development (e.g., educational trips), physical punishments, and no likelihood of a second chance. Despite the increasing salaries for professional soccer (Persson, 2011), financial incentives were not explicitly cited as pressure-inducing. The awarding of contracts that were consistently noted highlights how players' incentives to perform optimally were induced by short-term goals with all players discussing the importance of consistently performing to a high standard 'because only 1 or 2% get a professional contract.' (Player A, age 12). In the present study the facilitative and debilitating effects of contractual pressures were identified by all age groups, they have not previously been identified among players as young as 11 years (e.g., Reeves et al., 2009). A temporary reduction in contractual process was evident among some of the 17-year-old age group, which was attributed to relative contract security at this time:

Player C (age 18): 'The second year has been the most pressure. It's like when decisions get made on you... in the first year [when aged 17], if you don't perform you still have the second year, but then if you don't perform in the second year, they won't give you the contract.'

Players used consequences (e.g., on the bench) and rewards (e.g., playing with an older age-group) as a method of assessing their progress towards contract renewal:

Player D (age 14): 'If you did something bad the next game he [lead coach] might not start you [on the bench]... but then if you play well, he might start you or play you with the 15s and if you play up once and you do well, you will get a chance to do it again.'

Players aged 11–16 years discussed many physical forfeits that they were required to complete if they performed poorly in training (e.g., 'shuttle runs', 'moving the goals', and 'standing against the wall in a chair position'). These could produce unpleasant emotional consequences for some players (e.g., 'because if you lose, then you are going to have like the depression of losing,' (Player B, age 11), with players aged 11 and 12 noting that this was worse if forfeit attributed to their poor performance involved the whole team.

Researchers propose that adolescents experience a normative increase in sensitivity to rewards and punishment that induces pressure, in mid- to late adolescence and this then declines into young adulthood (Urošević et al., 2012). This study lends support to the suggestion of Bell et al., (2013, p.3) who contend that exposure to punishment-conditioned stimuli is 'exactly what is missing from modern development programs that discourage the use of punishment for fear of the negative emotional and motivational consequences.' Pleasant and unpleasant outcomes are an unavoidable feature of day-to-day life, and to avoid the possibility, or reality of unpleasant outcomes, presents ethical considerations in failing to prepare individuals for such eventualities. Therefore, it is important to attach meaningful rewards (e.g., training up an age group or selection) and meaningful punishment (e.g., deselection) to simulation training, alongside the development of strategies to manage these. This is particularly pertinent among adolescent populations who during this life stage are developing metacognitive skills that underpin a broader range of possible coping strategies (Compas et al., 2001).

### *Performance lifestyle*

The theme performance lifestyle represent the many on- and off-pitch 'challenges' and 'sacrifices' described as increasing the importance of performing optimally in training and competition. This included social (e.g., missing birthday parties), educational (e.g., time off school), and lifestyle

commitments (e.g., diet). Within Jones et al., (2002) study of mental toughness, elite performers discuss how lifestyle pressure could be used in 'some way as some sort of motivation' (p.208). In the present study, data indicate that appraised losses (actual or anticipated) resulting from the need to maintain a performance lifestyle could evoke pressure to perform (Lazarus, 1999):

Player A (age 13): 'You spend so much time at the academy... You miss all the stuff going on out of school with your mates you think 'Oh I can't, I've got football.'" You do not want to have any regrets.'

Player D (age 13). 'Yeah, exactly; you have got the pressure to perform otherwise it was all for nothing.'

Within academy soccer literature, the sacrifice of valued elements of adolescent lifestyles is deemed important in order to pursue a professional soccer career (Holt & Dunn, 2004). Given that so many talented young players are vying for so few professional contracts, we are advocating that players, coaches, parents, and teachers should be educated about the importance of holistic development. As emphasised by Wylleman et al., (2013), ensuring that the elite adolescent player's lifestyle involves holistic experiences, helps to develop a broad set of transferable coping skills that help players coping competencies for life rather than just sport-specific pressure.

### Personal incentives

Personal incentives were personal qualities that influenced the perceived importance of performing optimally. Two deductive sub-themes were identified: self-oriented (Baumeister & Showers, 1986) and public self-consciousness (Mesagno, 2009).

#### *Self-oriented*

All age-group players described personal standards and expectations that comprised of ego-oriented and task-oriented incentives to perform optimally. Ego-oriented incentives derived from the players' desire to demonstrate superior performance over others, evidenced by outcomes such as 'win games' and 'coming home with the trophy'. Task-oriented incentives prompted players to uphold competence in a manner that optimised self-focused improvements and mastery-focused outcomes such as 'being consistent... once you have set a high standard you need to keep it.' (Player A, age 13). Self-oriented incentives and the 'need' to maintain personal standards was perceived to be helpful: 'When you do well, you have got the pressure because you have set a high standard and you need to keep it.' (Player B, age 14). However, where a player's adopted 'really high' (e.g., never make a mistake) or rigid goals, this could generate unhelpful emotions and result in avoidance-coping: 'Pressure is made up of yourself... If you set yourself really high expectations and you aren't meeting them, then you will feel pressure and want to get the ball away from you.' (Player B, age 13).

Affective forecasting in the form of anticipated pleasant or unpleasant emotions was respectively associated with the achievement, or not, of self-oriented standards. This was also described as evoking pressure: 'He plays best when he is calm and relaxed before a game but he hyped himself up for this game... It was a derby game and probably thought about how he'd feel if they lost.' (Player D, age 13).

These findings indicate that pressure simulation that provides meaningful opportunity for mastery and/or ego-comparison will evoke personal incentives to perform. However, it is important to note that although self-oriented pressure may be helpful to facilitate skilled performance in the short-term, the long-term costs of rigid and inflexible incentives can be evidenced in mental health, for example experiencing depression (Turner, 2016). Self-oriented incentives are likely to develop and alter

throughout adolescence due to changing environments, and this can affect self-perception of achievement (Weiss & Williams, 2004). In particular, adolescents can often mirror the reported incentives and motivations of performance expressed by significant others such as parents and coaches. Research has indicated that parents who hold high standards coupled with admonishment for inferior performance attempts may promote negative self-evaluation tendencies, resulting in an increased anxiety to perform optimally (McArdle & Duda, 2004). Moreover, educating significant others on adaptive attitudes and achievement goals would be valuable within any adolescent performance context. Based on the findings from the present study, we advocate that cognitive behavioural workshops adjunctive to stimulation training facilitate flexible goals pursuits and adaptive management of self-oriented incentives.

### *Public self-consciousness*

Public self-consciousness captured players' thoughts on the performance expectations and standards they believed others (e.g., coaches, senior coaches, parents, and fans) expected from them. This study identified how academy soccer players worry about evaluation from others, including evaluations of being unskilled, incompetent, or unable to handle pressure. The preoccupation with how others may perceive them during performance may distract performers through evaluation apprehension cognitions (Mesagno et al., 2012), as illustrated by Player A (age 16):

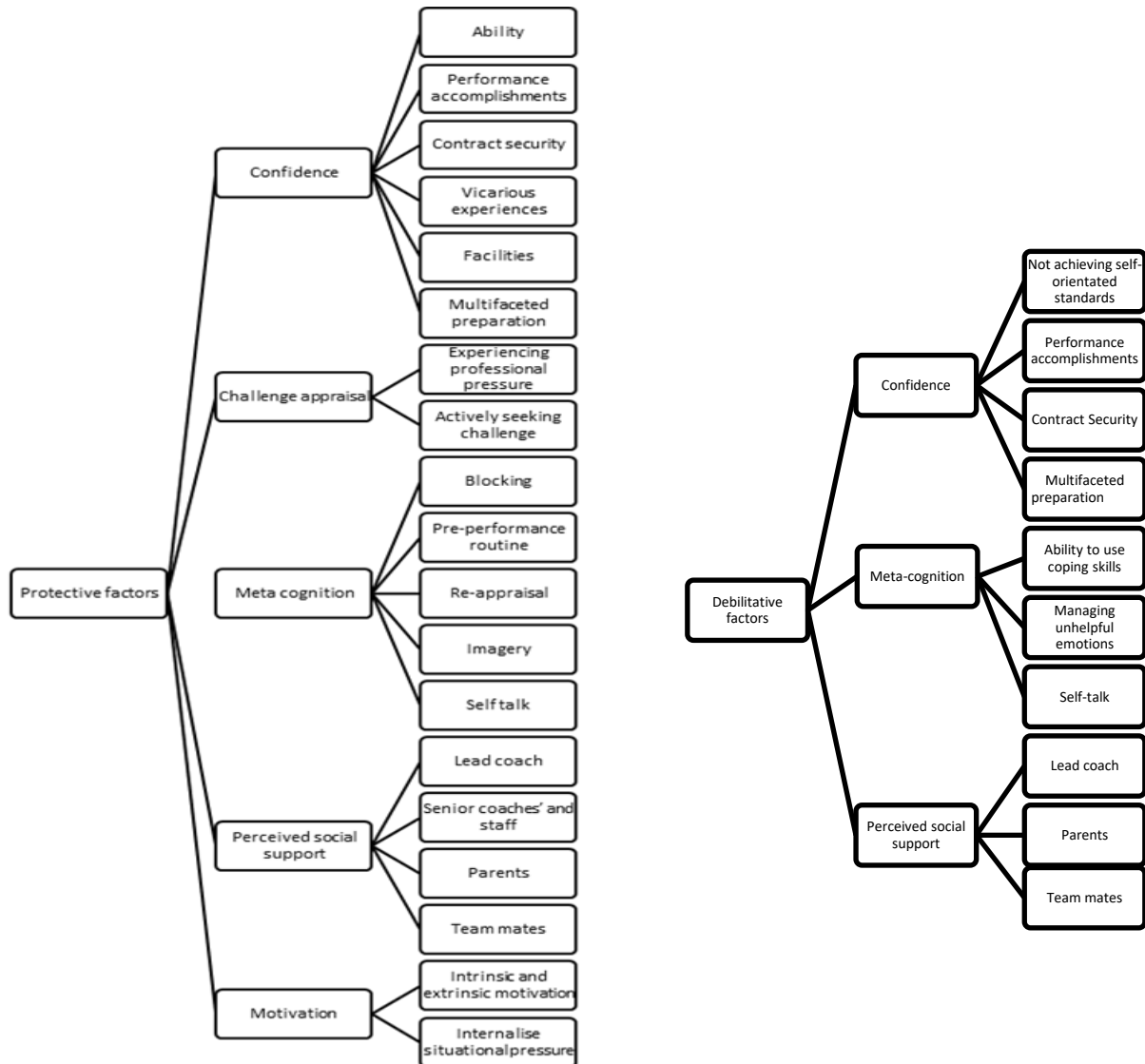
'You can think about the expectations from other people and that gets into your head... You start to think "I have to do this or I have to do that," because they might want me too. That can put you off a bit. If you can't cope, you think he [lead coach] thinks you can't be a player.'

The importance players may place on the need for approval from others may result from awareness that athletes are more likely to keep their place in the team if they gain the approval of the coaching staff and academy directory (Evans et al., 2013). The developmental changes that occur in adolescence, such as increases in cognitive abilities, self-consciousness, and awareness of social standards, also contribute towards the susceptibility for academy players to perceive public self-consciousness pressures (MacIntyre et al. 2014). Simulation training in the presence of others can be useful to help players reflect on the generation of an emotion that may have positive effects on performance or altering the appraisal of the stimulus to attenuate unhelpful emotional responses (Lazarus, 1999; 2000). Cognitive behavioural workshops can assist players in understanding how they may reframe the appraisal of anxiety symptoms or reduce goal relevance (i.e., how much is at stake) to control their emotional response (Jones, 2003).

### *Protective and debilitating factors*

Aligned with Fletcher and Sarkar's (2012) model, confidence, motivation, challenge appraisal, metacognition, and perceived social support were identified as being protective of performance under pressure. Of these, confidence, metacognition, and perceived social support could also be debilitating of performance under pressure.

Figure 2  
Protective and Debilitative Factors for Performance Under Pressure Among Academy Soccer Players Aged 11–18.



*Confidence*

Confidence was protective of performance under pressure with various sources described as influencing confidence including: performance accomplishments, preparation, and vicarious experiences. When describing pressurised performance, players often commented ‘pressure is to do with confidence’ and ‘need to ‘have to be confident’. (Player B, age 14).

Performance accomplishments were discussed by players as affirming confidence and providing a source of information based on one’s mastery experiences (Feltz, 2009). For example, ‘Making a really big tackle helps. It’s such a good feeling and you then can feel less pressure and more confident, and that’s when I’m playing my best.’ (Player C, age 12). Confidence was also affirmed within training sessions that were competitive and included ‘game realistic’ pressure scenarios. For example, ‘In training if you are doing a penalty shootout they [coaches] try and do crowd noises to see how they would cope.’ (Player C, age 12).

Within the present study, players perceived that existing training regimes did not adequately prepare them for the management of recognised pressures (e.g., superior opposition), and this was seen as

detrimental for confidence. For instance, players aged 13–16 noted ‘Training isn’t like a game. You know who is there and who isn’t there. Everyone watches the first team train, but no one watches us training. Sometimes you do wish that an 18s coach was there.’ (Player B, age 15).

In the present study, players aged 13–16 discussed how confidence could be undermined due to a lack of experience playing against opposition of varying physical statures. ‘When you train with the younger ones, you don’t have to be switched on a lot but then in a game they [the opposition] are twice the size of them [training players] so you aren’t prepared for that pressure.’ (Player D, age 14).

Training or playing competitively with teammates of a perceived superior ability was a method discussed by another under-14 player (Player C) to ‘see what I need to be training like... and I know I can do it by how close I am getting.’

Findings highlight the means by which simulation training may provide a source of confidence through performance accomplishments. The influence that performance experiences have on confidence can depend on the perceived difficulty of the task and the effort expended (Feltz, 2009). Therefore, it is important that simulation training provides players with opportunities to compete against different physical statures and perceived superior technical abilities with ‘game realistic’ scenarios.

Vicarious experiences were another important source of confidence, whereby observing others perform well under pressure demonstrated what coping behaviours may look like. For example, seeing older academy players transition in the first team (e.g., ‘You are confident that you can do it as he shows there is a pathway to get into the first team.’ (Player B, age 11) or observing the ability of their own teammates:

‘Player D (age 16): ‘A player that I used to play with... he handles pressure really well. He is composed, gets on the ball no matter where he is on the pitch. You can trust him on the ball; he doesn’t panic or rush... He just brings that composure and relaxedness to the team.’

The importance of providing adolescents with examples of adaptive performance under pressure from their respective peers or role models was clear within this study. This supports the findings of Thomas et al., (2019) who identified vicarious experiences to be a salient source of confidence among elite adolescent soccer players due to their stage of learning and undertaking new challenges.

### *Metacognition*

Metacognitive skills (e.g., rationalising, re-appraising, blocking, and positive self-talk) captured players’ knowledge of, and control over cognitions when performing under pressure (Fletcher & Sarkar, 2012). Metacognition was perceived to be important for players, whereby players discussed the importance of monitoring and/or knowing how to control their own thought processes to protect from rumination (e.g., continuous thoughts of previous mistakes) or unhelpful anticipatory thoughts (e.g., worrying about the end result).

‘Player C (age 17): ‘Every game you step out onto that pitch, you want to play well and you will play well if you think pressure is just a word. If you don’t think it and don’t feel it, it is just a word.’

MacIntyre et al., (2014) identified that metacognitive skills can coordinate the use of psychological skills (e.g., imagery and goal-setting). The use of music and thought-stopping was discussed by players during competition to ‘try and not to think about it... think about it as if it’s another game.’ Specifically, self-talk was discussed by players during competition to assist in appraising pressure adaptively and positively influencing the selection and control of coping strategies. Negative self-talk could evoke mild levels of anxiety that were helpful when performing under pressure: ‘I thought about what if I missed, but that

drove me on to score.’ (Player A, age 11). However, an inability to control unhelpful self-talk that manifested into rumination could evoke emotions that disrupted attentional control to the detriment of performance.

Player A (age 18): ‘In a game if you make a mistake you might think the same thing is going to happen again, so if you can’t block it out you might feel nervous and say “I’m not going to get on the ball and stuff like that.”’

Developing metacognitive skills is of general importance among adolescent populations. This study highlighted the benefits of psychological skills such as self-talk for academy players; simulation training should be presented as an opportunity for players to rehearse their use of psychological skills to manage unhelpful thoughts under pressure (MacIntyre et al., 2014).

### *Challenge appraisal*

A fundamental principle of CMR theory (Lazarus, 1999; 2000) is the idea that appraisal of pressure and coping resources interact to elicit responses. Within this study, players identified the importance of coping resources when appraising pressure, for example, ‘the thing is with pressure you have to be confident, remember that you are here for a reason because you obviously have the ability’. (Player C, age 13). Individuals that perceived that they have the capabilities and available resources to perform optimally under pressure can experience what is known as a challenge appraisal. A challenge appraisal is typically indicative of perceiving demands as an opportunity for growth. The following exchange between two players demonstrates how a challenge appraisal could help facilitate performance under pressure:

Player A (age 13): ‘There is always a pressure on you because there are another couple of hundred people fighting for my place but I think that you have to deal with it in life anyway especially if you aren’t a footballer and you go for a job interview to get another job. It’s exactly the same thing.’

Player C (age 13). Exactly. It’s a good thing to help push us and help us learn as you can’t do anything in life without dealing with pressure.

Pressure research has suggested that threat appraisals are associated with avoidance goals and ‘freezing’ under pressure (Jamieson et al., 2016). However, experiencing heightened feelings of threat alongside a challenge appraisal did benefit some players: ‘I was thinking the “what ifs” again what if I miss, what if I score. It helped me in a way because it drove me on to score.’

Moreover, simplifying appraisals as either threat or challenge may not adequately account for individuals who may display ‘dual styles’ of appraisal (Lazarus, 1999; Meijen et al., 2013). During intervention design there is a need to pay closer attention to the mechanisms (e.g., emotions and appraisals) that most benefit an individual’s performance.

### *Motivation*

Intrinsic motivation, in the form of ‘doing what you like and what you love best’ was described by players to protect performance under pressure – by enabling the player to ‘focus on trying to my play my best.’ (Player A, age 12). Players also described how extrinsic motives could be protective of performance under pressure ‘every single week we are fighting for a job. So you think about winning a lot which keeps you focused.’ (Player C, age 13). However, some players discussed how extrinsic motives alone could debilitate performance through distraction by ‘thinking of other things like winning it, holding the trophy instead of taking the penalty.’ (Player B, age 11).

Gagné and Deci (2005) contend that the internalisation of extrinsic motives can enhance autonomy in action, control outcomes and emotional regulation. Internalisation of external motives was captured within the data as a psychological process that could protect players when performing under pressure. For example, the extrinsic contingencies of professional soccer (e.g., results-based) were progressively transformed into personal values and self-motivations. This can be evidenced where players described an external contingency attached to performance output, but used this as a method of assessing their progress towards a goal they did find inherently meaningful: 'We've gone from performance [hands emphasise low] to results [hands higher] but I like it; I want to enjoy this pressure as it is what it would be like if we were professional.' (Player C, age 15).

### *Perception of social support*

Key sources of social support included the coach, senior coaches, parents and teammates. Informational and emotional support was influential in affirming self-confidence and maintaining task-focus on performance relevant cues (Rees & Freeman, 2015). For instance 'when we went to Holland we were nervous I remember [name of team mate] was really helpful when we went 1-0 down he was saying like we can still win this boys and keep focused which was really helpful'. (Player C, age 11).

Emotional support is an adolescents preferred type of support (Tamminen & Holt, 2012), this may explain why the perceived lack of emotional support increased the use of avoidance coping strategies: 'He kept drumming it into my head that I needed to keep working on my 1v1. It made me think I wasn't good and to just do my own thing.'

A perceived lack or avoiding the use social support has been attributed to withdrawal and an increase in anxiety (Polman et al., 2010). In contrast, players who seek social support have developed self-regulation skills which activate and sustain cognitions systematically oriented toward the attainment of goals. For example, the soccer academy uses reflection as a strategy used to help develop pressure-coping skills, this under 14 player discussed how if he found the reflection task challenging: 'I'd ask them [parent] for help as sometimes I would be confused with what I'm writing'. However, this player then went on to discuss how: 'But if I had a poor game sometimes, he [parent] would take over and write it himself.'

By not enabling players to take ownership may undermine the development of self-regulation techniques that may increase anxiety and performance failure under pressure (Mesagno et al., 2012). For example, this under-18 player disclosed a lack of personal responsibility and ownership in seeking support and how it may influence his ability to perform optimally: 'It should be the coach you speak to, but it was the fact you didn't want to. They don't ask why you may have trained badly. I think it is the coaches understanding they need to pull you to one side and ask.'

Conditions that may develop self-regulatory skills and facilitate adolescents' approach coping are trust, maturity, and approval from the eventual source of support (Camara et al., 2017). Moreover, in order to develop adolescents seeking social support when needed, significant individuals (e.g., coach or teacher) should look to enhance perceived relatedness within competition and training, but also educating individuals on the importance of ownership.

## CONCLUSION

A recent systematic review (Kent et al., 2018) identified a need to systematically contextualise pressure interventions. This study illustrates contextualisation, with findings highlighting why this is a necessary step for any individual undertaking research or applied work in pressure and its management. Thematic analysis identified meaningful situational (presence of competition, time, presence of others, tangible

rewards, and performance lifestyle) and personal incentives (self-oriented and public self-consciousness) as perceived by academy soccer players that could induce pressure to perform optimally. The way in which the identified situational incentives and personal incentives could be integrated within simulation training to increase fidelity were highlighted. Particularly, emphasis of simulation training within the context of adolescent soccer players should focus on developing a competitive task, under time restrictions and in the presence of a meaningful crowd. Where possible the task should take place within a stadia environment in a competitive format such as a league table, with meaningful rewards and punishment assigned to the performance.

This study also highlighted psychological skills to enhance academy soccer players' confidence, metacognition, challenge appraisal, motivation and social support. Central to effective cognitive-behavioural workshops should be to promote protective factors that are contextually relevant. In particular, metacognitive skills to help control unhelpful self-talk for the adaptive appraisal of pressure and the importance of ownership and seeking social support.

There are limitations within the present study that must be acknowledged. During focus group interviews, while players did discuss sensitive information (e.g., parental, coach, and teammate pressures), it is plausible that participants were not willing or able to discuss all thoughts and actions associated with a troubled personal experience of pressure (Folkman & Moskowitz, 2004). However, on balance, the use of focus groups did appear to enable players to compare or contrast pressure experiences, something not possible using individual interviews.

A further possible limitation was that the first author (who undertook interviews) provided sport psychology support services within the elite soccer academy environment for one year prior to data collection. These experiences helped construct a deeper understanding of the academy culture and terminology, which enabled interviews to progress using a more conversational tone (Rubin & Rubin, 2011). However, one implication of this familiarity is how the researcher's assumptions and values may transmit into the interpretation of the meanings and experiences of players' discourses during the interview process (Smith & McGannon, 2018). To try and mitigate this, the first author engaged in self-reflexive practices to generate field notes about subjective feelings and experiences when developing and undertaking interviews, and to challenge interpretations during themes construction (Smith & McGannon, 2018). Furthermore, during theme construction, the second author acted as a critical friend to challenge the assumptions and interpretations of the first author.

The present study illustrates a process for developing a contextualised intervention intended to enhance the coping skills of academy players when performing under pressure. This was achieved by establishing through focus group interviews, incentives that induce pressure as perceived by academy soccer players and psychological factors, both protective and debilitating, for superior performance under pressure. Adolescence is a time when behavioural and health problems can emerge or worsen if individuals cannot effectively cope (Yeager et al., 2018). Where the focal population is adolescents, the findings within this study also have implications for the design of pressure interventions to assist adolescents such as exams or public speaking. Using this study parents, teachers, coaches, social workers and child psychologists may be better informed of the incentives that induce pressure within an adolescent population. In addition, such individuals can be better informed of the meaningful protective coping resources and coping competencies to enhance performance under pressure, such as seeking social support, confidence and developing meta-cognitive skills.

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