

Monitoring the Climate: Exploring the Psychological Environment in an Elite Soccer
Academy

Address Correspondence to:

Abstract

Fostering a constructive motivational climate is an important contributor to an individual's motivation (Ames, 1992a), yet research within elite sport remains limited. The purpose of this study was to utilise the task, authority, recognition, grouping, evaluation, and time (TARGET) framework to explore the motivational climate in an elite youth football academy. Sixty-four academy training sessions were observed. Findings suggested that the task, authority, recognition, and evaluation structures are most important in predicting a mastery motivational climate. Task organisation parameters and coach behaviours influential in promoting adaptive and less adaptive psychological environments are discussed.

Keywords: TARGET, motivational climate, qualitative, British football academy

Lay Summary

This paper explores the motivational climate of an elite youth football academy. The TARGET framework was used to appraise sixty-four training sessions. The observations suggest that the task, authority, and recognition/evaluation structures are important moderators of the motivational climate within an elite youth football academy.

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Literature Review

The English youth football academy system homes some of the country's most promising elite youth players. Unfortunately, becoming a professional player in the top English League has become increasingly difficult, with clubs willing to recruit young players of the highest calibre from around the world. Consequently, very few English-born players make it to the highest tier of the game (Roan, 2014). The uncertainty surrounding opportunities to be successful in realising ambitions (Mills, Butt, Maynard, & Harwood, 2014a; Pitt, Wolfson, & Moss, 2014) elevates the significance of a player's motivation throughout their academy experience. The impetus for players to continually improve and become world-class in order to transition into the top tier of English football (Mills et al., 2014a) relies upon an environment that explicitly promotes players' individual development and self-referenced motivation. This particular "psychological" environment is described as a mastery motivational climate; it is promoted when private recognition of competence is given as development and progress are made, individual tasks are accomplished, and/or new skills are learned (Ames, 1992a).

Research has long supported the notion that an individual's achievement environment plays a significant role in their motivation, with mastery motivational climates consistently shown to promote adaptive motivational responses (Harwood, Keegan, Smith, & Raine, 2015; Ntoumanis & Biddle, 1999). Conversely, a perceived performance climate has been linked to less adaptive responses such as, boredom, beliefs that ability leads to success rather than effort, a negative attitude, and lack of enjoyment (e.g., Carpenter & Morgan, 1999). Furthermore, previous research in an elite sport context has alluded to the moderating role of

the situation, and specifically the role of recognition and evaluation, on an athlete's motivational outlook (e.g., Harwood & Swain, 1998).

Using Epstein's (1989) task, authority, recognition, grouping, evaluation, and time (TARGET) framework, the current study seeks to explore the motivational climate within an elite youth sport setting; an environment that has, to date, received little attention within the literature. Specifically, it will describe the management and behaviours of coaches during training as they pertain to the motivational climate, and the resultant behaviours and interactions of players, while also evaluating the effectiveness of the TARGET framework to illuminate the psychological environment.

Situational Factors Affecting Motivation

Drawing on achievement goal theory (Nicholls, 1984), the term motivational climate was adopted to describe contextual factors that moderate an individual's perceptions of competence (Ames, 1992a). Accordingly, there are two types of climate, a mastery climate and a performance climate (Dweck & Leggett, 1988). A mastery climate is characterised by the promotion of self-referenced criteria for demonstrating competence, and an environment where effort and achievement are salient, whilst a performance climate focuses upon normative comparisons of ability (Morgan, 2008). The inter-correlations between scales used to measure motivational climates suggest that the more the coach emphasises mastery-involvement, the less likely he/she is to promote social comparison (Duda & Balaguer, 2007). Nevertheless, it is also possible that a situation perceived as promoting self-referenced learning and individual goals, could be compromised (in terms of the adaptive psychological environment) through discourse of the leaders.

Although it is argued that a performance climate should not be actively discouraged (Roberts & Kristiansen, 2012), research has, across a variety of achievement domains, consistently advocated a mastery motivational climate. For example, in the classroom

(Ames, Ames, & Felker, 1977); in physical education settings (Morgan & Kingston, 2008) and in youth sport domains (Seifriz, Duda, & Chi, 1992). It is to this work that we now turn.

In their review, Ntoumanis and Biddle (1999) surmised that the fostering of a mastery motivational climate elicited 'adaptive' motivational behaviours for students in physical activity settings. Harwood et al. (2015) extended this summary to include motivational climate investigations conducted within sport environments. They similarly reported that a mastery motivational climate was consistently associated with positive motivational behaviours, and thus affirmed the benefits of creating a mastery motivational climate within sport settings. Further, Curran, Hill, Hall, and Jowett (2015) identified that a mastery motivational climate promoted higher engagement in sport than a performance climate. Previous research in sport has also linked the athlete's perception of a mastery climate to increased enjoyment (Seifriz et al., 1992), increased satisfaction (Balaguer, Crespo, & Duda, 1999), increased (task and social) cohesion (McLaren, Eys, & Murray, 2015), and increased task-orientation (Saotome, Harada, & Nakamura, 2012).

In terms of key drivers of the psychological environment, Ames (1992b) asserted that the leader within an achievement environment was chiefly responsible for creating an adaptive motivational climate. More specifically, within a sport setting, Smith, Smoll, and Cumming (2007) demonstrated the significant impact that a coach with knowledge of mastery motivational climates (through a single education workshop) could have upon the behaviours of their athletes. However, despite research highlighting the strong influence that coaches have upon the athlete's perception of ability within British football academies (e.g., Cushion & Jones, 2006), and the impact of leaders on motivation in a junior sport context (e.g., Chan, Lonsdale, & Fung, 2012), there is an absence of research exploring the motivational climate in football academies. With perceived ability central to goal involvement (Ames, 1992a), the actions of the coach become a significant factor in the

motivation of academy players; a fruitful approach to illuminate these processes may be the TARGET framework.

TARGET

Based on the work of Epstein (1989), Ames (1992a) utilised the TARGET taxonomy to emphasise features of the achievement setting that can be managed to promote a more mastery-involved motivational climate. The acronym TARGET is used to describe a framework to capture features of the environment related to task, authority, recognition, grouping, evaluation, and time (Ames, 1992a). Furthermore, it has been suggested that these facets of the environment are interdependent; meaning that changing one aspect is likely to have a consequential effect elsewhere (Epstein, 1989). This implies that the TARGET structures could be additive, with a more influential structure in promoting a mastery climate being able to compensate for a weaker one (e.g., a strong mastery-involving task structure can compensate for a lesser mastery-involving recognition structure, or vice-versa) (Morgan & Kingston, 2008; Morgan, Sproule, Weigand, & Carpenter, 2005). In contrast, Ames (1992b) proposed that the TARGET structures could be seen as multiplicative, such that all features of TARGET need to be mastery-involving to create a mastery motivational climate. The approach adopted in this study enables us to identify which TARGET structures are activated, and evaluate their contribution to the overarching motivational climate.

There are a range of strategies that can be used to help facilitate a mastery motivational climate, and in-turn support the task-involvement of the individual. Specifically, and working through the TARGET structures in turn, tasks are required to be varied, diverse, and challenging for those involved, while reducing the opportunity for comparison with others (Ames, 1992a). Embedded within differentiated and novel tasks (Morgan, 2008), there should be opportunities for individuals to pursue self-referenced goals (Roberts, 2001). The authority structure is based upon the concept of empowerment

(Morgan, 2008) with individuals being given the opportunity to make decisions and be part of the learning process (Ames, 1992a). Roberts (2001) also advised that the choices individuals make are to be perceived to be *real*, otherwise the perception of responsibility is diminished. Recognition is a structure that relates to how behaviours are recognised (Ames, 1992a) and the rewards obtained due to that behaviour (Keegan, Harwood, Spray, & Lavalley, 2010). Notably, individuals in a mastery climate are recognised for their efforts, learning from mistakes and making personal progress; creativity in pursuit of this is encouraged. Grouping is the fourth structure proposed by Ames (1992a) and is described as the criteria by which individuals are brought together or separated (Roberts, 2001). Morgan (2008) described how co-operative groups of mixed ability and varied grouping arrangements will help foster a mastery motivational climate. The fifth structure is evaluation. Closely related to the recognition structure, evaluation relates to how behaviours are assessed or evaluated; it is the meaningfulness of information given to the players (Roberts, 2001). Ames (1992a) described private, self-referenced, and salient evaluations as most effective in fostering a mastery motivational climate. The final structure is time. The time structure relates to the pace-of-learning (Roberts, 2001) and the flexibility of the task to allow for individuals to achieve mastery within their own time-frame (Morgan, 2008).

The TARGET framework has been effective in the exploration and manipulation of a mastery motivational climate within physical education domains (e.g., Bowler, 2009; Morgan & Carpenter, 2002; Morgan & Kingston, 2008). It has also, more recently, been applied to sport. For example, Cecchini, Fernandez-Rio, Mendez-Gimenez, Cecchini, and Martins (2014) conducted a 12-week mastery climate intervention for a group of student-athletes. They concluded that utilising the TARGET framework facilitated the coach's work, with participants in the experimental group reporting, accelerated levels of improvement, more decision making opportunities, increased persistence and effort, better social relations, higher

competence and autonomy, more self-determined motivation, lower boredom, and more cooperative learning. There remains however, limited research exploring TARGET in an elite team environment, which considers task organisation and coach-athlete dynamics, while also conducting a fine-grained analysis of the TARGET structures over a protracted time-period.

The current paper utilises the TARGET framework to examine the motivational climate that is fostered within an elite youth football academy. It does so by scrutinising organisation during training, the associated coach-athlete interactions, and the consequences for player behaviours. The study is novel, and of particular value from a theoretical and practical perspective, because it: (a) explores an environment that is high-risk in terms of motivational well-being, (b) conducts a refined examination and analysis of coach-athlete interactions, and (c) considers the efficacy of TARGET and its structures, as well as the interrelationship between those structures, in describing the psychological environment created.

Methodology

Participants

Participating coaches and players were associated with the academy of a professional football club that, at the time of the research, competed in the top tier of the British game (Premier League). All coaches were all highly qualified with a minimum of two-years' experience. The academy had been recognised as Category 2 status by the Elite Player Performance Plan (EPPP) audit that occurred during the researcher's time at the club¹. All coaches and players participating within a given training session were observed. Across the

¹ The EPPP was an initiative started in 2011 by the Premier League to standardise English Football academies. Each academy is audited and rated as either Category: 1, 2, 3 or 4. Category 1 is the highest rating.

seven-month (in season) observation period, six academy coaches and five academy squads (Under 12 to Under 16) were observed (total players $n= 85-95$).

Positioning of the Researcher

Although positivist studies have considerably advanced the area of motivational climate within physical exercise and sport (e.g., Boyce, Gano-Overway, & Campbell, 2009; Seifriz et al., 1992; Smith et al., 2007) one criticism of this approach is that the researcher is often “separated from the reality of what social agents actually do to influence athlete motivation” (Keegan, Harwood, Spray, & Lavalley, 2014, pp.98). For this study, one member of the research team had the nominal title of Sport Psychology Intern at the academy. His role was primarily to observe the environment and record events pertinent to the research. Further, he assisted the coaches, and supported the functioning of the coaching team without ever directly instructing the players. As a participant-observer, he was immersed within academy life, participated in sessions, built rapport, developed friendships, and spoke freely and in confidence with players and coaches; he was accepted as an integral member of the academy by both parties.

Procedure

Following written agreement from the club and receipt of institutional ethics approval, voluntary consent was secured from all coaches being observed. The head of the academy consented to all academy players being observed in loco parentis. All participants were verbally briefed about the researcher’s presence in the academy and the study. Clarification was then provided for all concerned on the methods and nature of information being recorded, and the role of the researcher within the coaching group. All coaches and players were given the option to opt out of the research at any time without penalty; nobody involved took this option. Details of the TARGET framework were not provided to the coaches in advance of any observations, nor did any report detail knowledge of the concept.

Opportunities to observe coach and player interactions occurred twice a week at the academy training ground; this consisted of one evening and the weekly 'day release' sessions (whereby academy players took the day off from school to train and continue studies at the academy). In total 64 training sessions were observed and analysed with each training sessions lasting between 45 and 90 minutes.

Data were collected through observations by one member of the research team. These were guided by the TARGET structures and the criteria used to predict a mastery or performance-involved motivational climate (Ames, 1992a; Morgan & Kingston, 2008; 2010). For example, with regards to the activity itself, (a) how was the activity organised, (b) did instructions promote self-referenced goals, (c) was the focus on individual performance or social comparison, (d) to what extent were players invited to be part of the learning process, and (e) did recognition emphasise effort, personal progress and creativity, or did it reinforce social comparison. Observations focused on organisation of the tasks, and the actions of, and interactions between, coaches and players. Observed behaviours were given context through the structures of the TARGET framework, so that it was possible to understand, on weight of evidence, what aspects of the coaching environment had influenced specific player behaviours. Field-notes were taken during the training sessions as events were observed, 'events' included: (a) the organisation of the practices, (b) coach and player discourse, and (c) coach and player behaviours related to TARGET structures. On occasions, coaches were asked to provide clarity to help inform observations, though this was not a systematic process. Other than the reflections of the research lead, field-notes were the only outputs from the observations. They were written-up fully in a diary kept by the researcher. An inference was then made regarding the overarching climate created. This judgement was informed by the criteria pertinent to the relevant TARGET structures, and (with reference to previous research) the congruence between these criteria and coach/player behaviours.

Data Analysis

Although Interpretative Phenomenological Analysis (IPA) is normally associated with analysis of semi-structured interviews, it was selected here to guide interpretation of the field-note data that might otherwise have been susceptible to researcher bias. Informed by guidelines proposed by Smith and Osborn (2003), the current paper adopted the following steps to analyse the diarised field-notes. Step 1 involved the reading and re-reading of diarised field-notes in order to focus the analysis. Step 2 involved an initial exploration of data through noting of content and addition of any immediate interpretative comments relating to the player behaviours across each of the TARGET structures. Step 3 was the coding of common themes through the reading of researcher comments made in Step 2, and this step was conducted on each TARGET structure individually. Step 4 involved the search for connections between the structures, and Step 5 was the repetition of the previous steps across each source of data (the remaining structures of the TARGET framework). Step 6 involved the appraisal of all TARGET structures with a focus on those appearing dominant; subsequently judgements were made on the overarching motivational climate. The wider research team (n=3) were involved in Steps 3 through 6, to: (a) facilitate recognition of emerging themes, (b) saturate each of the TARGET structures, and (c) consider overlap and links between the structures (for example, where setting up of practices promoted a mastery motivational climate through both task and authority aspects). This review of the raw data, and particularly identified inconsistencies, promoted a reflective process which led to a re-evaluation of field-notes. In addition to limiting participant-observer bias, it allowed a deeper insight into the phenomena being studied.

Results

The observation data comprised coach strategies and actions, and resultant player and coach behaviours; these facets of the environment permitted exploration of the motivational climate within the academy setting using the TARGET framework.

Specifically, across the seven months of observations, coaching behaviours and interactions with the players predominantly focused on supporting personal progress and individualised improvement. Furthermore, organisation of tasks and other situational conditions (e.g., variety in tasks) often appeared congruent with promoting a mastery motivational climate. There were some variations throughout the season with respect to the extent to which, and frequency of incidents where, conditions might lend themselves to promotion of a mastery climate, and, albeit far from the norm, the extent to which the converse (performance-involved climate) was emphasised. In the sections to follow, we consider each structure of TARGET and describe: (a) structural aspects and coach behaviours pertinent to a mastery and performance climate, (b) the consequences for coach-athlete interactions, and (c) the influence exerted by each TARGET structure on the overall psychological environment.

Task

The task element of TARGET pertains to the organisation of activities in terms of the focus on self-referenced improvement versus ability comparisons, and the promotion of optimal challenge for all. Across the period of observations, the vast majority of sessions incorporated practice activities structured in a manner corresponding to mastery-involving criteria; each practice session eliciting largely adaptive behaviours from the players. For example, varied tasks with a focus on personal skill development resulted in maintained effort and coordinated problem solving. The discourse below illustrates the link between the coach's organisation of the task and the expectations placed on the players, with a clear emphasis on promoting a mastery motivational climate.

The game was split into thirds with different decision making challenges required for each third (type of pass, angle of receiving, and bringing another player into the attack). Players rotated around across positions with a different role. There was a buzz about the session. The players were continually challenged, but not once compared; it was all about them and their own progress. “*Can you do it?* [emphasis added]” rang around the pitch as Simon continually questioned and pushed the players. There was a real edge, not an aggressive one, but just a purposeful state of mind from every single player.

In setting up the task, elements of other structures in the TARGET framework were simultaneously at play (e.g., authority, where players make decisions and are integral to the learning process); this suggests that the structural aspects of the task do not work in isolation to predict the overall psychological environment. However, while an adaptive mastery climate largely prevailed, observations also highlighted the fragility of task structures to being undermined by ad hoc coaching discourse and the subsequent impact that contradictory goals have upon player behaviour.

Simon outlined the drill. It was an opposed practice that relied on short passing, the theme of the day. He challenged the players to develop their shorter passing in this drill and to focus on quality. The aim was to complete passes and maintain possession. Walking out of the coned area Simon shouted: “*I think reds will win!* [emphasis added]” What followed was an array of cheating, arguing, fouling, and an overall poor quality of passing. Simon looked on, frustrated and confused.

Clearly, the interjection of the coach as he walked away led players to more performance-involved criterion. Although there were some structural aspects of the sessions (i.e., repetitive practices with little variation or differentiation that emphasised normative ability comparisons) that aligned with performance-involved criteria, these typically occurred earlier

in the observation period. This approach was justified by Luke (U12 Academy Coach) pitch-side one morning, when he stated: “the first part of the season is to standardise the players.” Upon further questioning, Luke described that the objective was to get players to self-evaluate their levels of performance and engagement, while developing an understanding of what is required to give them the best opportunity to be coached to a higher level. Further, he suggested that, given the influx of players, level of competition, and unfamiliarity of certain tasks during training it was necessary. To facilitate this understanding, coaches often adopted command-teaching characteristics (Mosston & Ashworth, 2002) to get players to reproduce desired behaviours quickly (see Morgan, 2008). Although some aspects of these sessions would reasonably predict promotion of social comparison, in general, those aspects aligned to a mastery-involved motivational climate (e.g., associated with authority or recognition/evaluation) tended to be dominant in predicting the climate. Observations highlighted that it may not be the structure of the practice, but the explicit expectations of the coach within that task that had the dominant effect in determining the pervasive climate and the consequential conduct of players. For example, as observed in Simon’s session, discourse that undermines self-referenced (mastery) criteria for judging competence of a task often resulted in negative behaviours from players (e.g., reduced effort, and disengagement with set tasks).

Authority

The authority structure is associated with the opportunities provided for decision making, leadership, and involvement of the learner in the learning process. In approximately 95% of the training sessions where mastery-involved criteria (and elicited behaviours congruent with this type of psychological environment) dominated, the authority elements were exclusively task-involving. As the season progressed, all age-groups were given more authority through the sessions, with practices more aligned to criteria reflecting a mastery-involved authority structure (e.g., increased player decision making, opportunity for

leadership, ownership over own progress etc.). The excerpts that follow highlight the change in autonomy (in the form of questioning) given to the players as the season progressed.

Luke gave the players lower order questions (e.g., “What is the aim of this session?,” “What have we got to do here?,” and “Should we keep the ball?”), but continued to remove any player ownership as their [players’] behaviours got worse.

...he [Luke] only intervened three times in twenty-five minutes and with individualised higher-order questions when he did intervene (e.g., “Why is this important?” or “How can that option help you?”); giving players lots of authority to play, make the decisions and actively run the practice.

The intent here was to develop independence through promoting player ownership with regards to their development. Through the coach empowering the individual, and making them part of the learning process, the authority structure of TARGET might be regarded as a key predictor in the creation of mastery-involved climates - even when other TARGET structures aligned with more performance-involved criterion. For example, when structural features of the task were on occasions predictive of a performance climate (e.g., repetitive undifferentiated tasks at the start of the season), the consequence of explicitly empowering players were behaviours suggesting the converse (e.g., cooperative engagement, high effort). Consequently, in such scenarios, a mastery climate seemed to predominate. It should be noted however, that questions (by Luke) were often rhetorical; if pervasive, this has the potential to actually undermine independence, as the coach will immediately provide answers to the questions posed.

Recognition/Evaluation

Although the recognition and evaluation structures are often treated as separate constructs (e.g., Ames, 1992a), the current study adopts Ames’ (1992b) approach in considering them simultaneously. These combined structures are concerned with evaluation

and feedback events within the training sessions. To promote a mastery climate the emphasis should be on self-referenced personal progress and effort, rather than on evaluation and feedback, which potentially reinforces social comparison. Similar to the task and authority structures, features of the recognition/evaluation structures congruent with promoting a mastery motivational climate were present in the vast majority (all but three) of the observed sessions. This highlights the significance of recognition, and the value that coaches put on effective interventions and meaningful feedback to create a motivationally supportive environment. The following commentary demonstrates the consideration that coaches at the academy had for *how* and for *what* they provide feedback: "...discourse was very positive... the coach did not criticise any player for attempting a long ball-whether it was successful or not. Rather, players were positively recognised for their efforts and decision making in attempting longer passes".

There were a number of specific strategies used to support a mastery motivational climate. Using a second coach working one to one with players, whilst the first coach runs the practice, facilitated the private use of encouragement and problem-based questioning (e.g., "Can you do it?"). Further, providing carefully phrased evaluation so that feedback was attributable to target behaviours (i.e., "*Good work* [emphasis added], that happened because you checked your run."), and the private use of positive and open ended questioning to encourage reflection ensured self-referenced learning was promoted.

In contrast, on those rare occasions where a performance climate appeared to dominate, it was the prominence of negative feedback delivered in public that caused this occurrence. Such feedback from the coaches typically targeted, a lack of effort, poor performance of skill, or 'sub-academy-standard' performance; each of which potentially promote normative comparisons of ability. Interestingly, this feedback appeared to entirely undermine the mastery-supporting aspects of other structures. In each of the excerpts below,

the organization of a practice was observed to support a mastery motivational climate, while the recognition given to players and the explicit feedback appeared to facilitate a contrasting climate.

The scores and groups were compared publicly throughout. The emphasis on winning started to have a negative effect on behaviours and focus. Players started to accuse the other teams of cheating to win. The environment turned hostile, driven by normative comparisons. Three-quarters of the group appeared off task at one point, leading to negative behaviours such as arguing, cheating, and reduced overall efforts. Aaron got corrective feedback from the coach - his performance dropped further, giving possession away again and again. His immediate response to this public negative feedback was minimal...he stood-still looking dejected. From that point, he never made eye contact with coaches and did not communicate to team mates.

The interaction with the player (in this case) arguably created more of an issue than the mistake during training warranted. The impact was quite clear, but also was the apparent deliberate attempt (by the coaches) to more frequently give negative feedback in public (or at least concern themselves less with giving such feedback privately) as players transition through the academy. It is important to acknowledge that, while such interactions were considered an exception across the season, it may be that developing resilience through the occasional publically administered negative feedback may be part of the academy experience. This suggests that this is an inherent part of the elite youth football environment (i.e., that players are expected to develop a resilience to publicised feedback).

Grouping

Grouping relates to the criteria by which individuals are brought together or separated. The manner with which players were organised into groups, and the basis for grouping academy players was congruent with criteria for both mastery and performance-

involved climates; this also appeared to change readily from session to session. For example, in one session the groupings were clearly random, with no eye contact, while in another it would be measured, with changes often made through the selection process. Despite the different strategies and criteria used to group players, this facet did not appear to exert any independent influence on the psychological environment and behaviours of the players.

These observations (of the limited impact of the grouping structure in comparison to the task, authority, recognition, and evaluation structures) could be due to the higher levels of ability, and less perceived variability in ability within the academy setting, which means that ability perceptions are less relevant in this context. However, it is worth noting that there was a tangible difference in the responses of players to self-grouping compared to when groupings were dictated by the coach: “the players almost held their breath as the coach handed the bibs out to the specific players”.

The issue described above was observed on a number of occasions, especially in the younger age groups, and during the first few months of the observations. However, it did not appear to have any negative consequences for motivation and/or behaviours. The concern by the younger players is understandable, having just entered the academy, they might reasonably suppose that the selection of training groups could signify the coaches' perceptions of some sort of ability hierarchy in the players. The older groups were more reserved, perhaps because of a greater appreciation of the broader value of fellow players.

Time

The time structure is concerned with the time spent working on tasks and the level of intervention by the coaches. Flexibility within the task to allow individuals to master challenges within a preferred time-frame promotes a mastery motivational climate, whereas time constraints while working on skills and the opportunity for social comparison elicits a performance climate.

Training for the academy players often involved small group work and position-specific practices. Due to the time constraints for the general organisation of training, the players were often given limited scope for flexibility to master skills at their preferred rate. However, coaches used discourse and other strategies to facilitate the notion of timelessness during practices, for example: (a) not referring to time constraints, (b) letting self-reflection guide progression instead of time, and (c) giving players the decision of when to progress. The de-emphasis of time constraints illustrates how coaches used this structure to try and promote mastery-involved criteria for evaluating competence. However, as the excerpt below suggests, when the aims of the task were unclear, this flexibility had a paradoxical effect.

No time constraints were announced to players, giving an impression that they take time to learn and manage the process of decision making. However, the specific aims of the practice lacked clarity. In the absence of challenge, players began to loaf and become lazy in their performance. Players did not seem to know what they were meant to improve, and consequently struggled to even start to think about how this could be done.

Overall, the time structure in isolation did not appear to support or undermine any particular criteria for judging competence, but rather, was a facet of the task itself. It may be considered to work indirectly within the task structure when autonomy was given over the time spent working on elements of the task.

Discussion

The purpose of this study was to examine the motivational climate within an elite soccer academy utilising the TARGET descriptors as a framework for the research group's interpretation and evaluation. Further, through the field-notes of a participant-observer, it sought to describe the environmental conditions influencing the motivational climate and the

observer's views on the coach-athlete interactions, and the interrelationships between the various structures of TARGET in promoting the psychological environment. The results demonstrate that TARGET provides a meaningful framework through which to evaluate conditions pertaining to the motivational climate. Further, the observations help to illustrate the key moderating factors influencing the creation of either a learning or social comparison based psychological environment. The discussion will consider the theoretical and practical ramifications of the observations, while providing some guidance on how practitioners can better support the motivation and learning of the players within an academy environment.

Across all age groups, coaches consistently demonstrated behaviours and promoted structures congruent with promotion of a mastery motivational climate. For example, they used varied tasks with a focus on personal skill development, provided opportunities for player input and decision making, and ensured that recognition was given for effort and good decisions. These clear attempts to create adaptive mastery-involved conditions demonstrate the value assigned to adaptive, task-involved behaviours within football at the elite youth level. This is a promising development, as Carpenter and Yates (1997) had previously argued that higher ability footballers were typically low in task-involving behaviours. Furthermore, and in accordance with previous research conducted across physical education (e.g., Morgan & Kingston, 2008) and youth sport domains (Cecchini et al., 2014; Smith et al., 2007), associated adaptive player behaviours were displayed when conditions and coaching behaviours facilitated a mastery-involved motivational climate. Specifically, behaviours included: (a) a clear focus on the task requirements, (b) wanting the ball, (c) seeking challenges, (d) creativity, (e) active questioning, and (f) intensity and persistence to meet requirements of the practice. This supports previous research that has identified constructive behaviours as a result of a mastery motivational climate in both physical education (e.g.,

Bowler, 2009; Carpenter & Morgan, 1999) and sport (e.g., Cecchini et al., 2014; Hassan & Morgan, 2015).

There were a number of instances where coach discourse appeared to promote social comparison, even when practices were organised in a manner aligned to a mastery motivational climate. This may represent a calculated strategy by the coaches, and is consistent with research into mental toughness in football academies (i.e., Cook, Crust, Littlewood, Nesti, & Allen-Collinson, 2014). Here, the resilience to cope effectively with different stressors (e.g., bouncing back from criticism, desire to be the best in games and training, a strong feeling to survive; see Cook et al., 2014, p. 335) were identified as important requirements for making the transition into professional football (Mills, Butt, Maynard, & Harwood, 2012). However, consequential motivationally-maladaptive behaviours were often evident in such situations. For example, reduced effort, disengaging with the task, cheating and arguing with/hostility towards peers, and attempts to reduce levels of personal challenge. This provides strong evidence that structural aspects of practice (e.g., task parameters, choice, grouping, or freedom to work at one's own pace) may be less important than coach discourse in predicting the motivational climate and associated player responses.

In terms of observable effects, the task, authority, and recognition/evaluation structures appeared most influential in promoting adaptive player engagement and behaviours of elite youth academy footballers. Furthermore, in such cases, these structures were clearly aligned with conditions purported to promote a mastery-involved motivational climate. Moreover, when the overall climate was adjudged mastery-involved, the task structure always fulfilled mastery criteria. Similarly, a mastery-involved climate prevailed in all but three sessions when the recognition and evaluation structures aligned with mastery criteria, and in all but four sessions when the authority structure adhered to mastery-involved criteria.

These results suggest “central” structures, and indicate the variable influence of TARGET structures to independently effect a mastery motivational climate.

Considering the structures in more detail, the observations suggested that whenever the authority and recognition/evaluation aspects aligned with mastery criteria, behaviours congruent with a mastery-involved climate emerged. Further, even in the instances when other TARGET structures (except recognition and evaluation) might be predicted to promote a performance (social-comparison based) climate, the observed behaviours of players continued to be motivationally adaptive (e.g., higher effort, persistence, clear focus on task challenges, etc.); behaviours reflective of mastery-involvement. This supports the view that evaluation is the most salient of TARGET features in effecting motivation (Ames, 1992b; Harwood & Swain, 1998). Further, our findings support the suggestions of Ames that TARGET structures possess additive, rather than a multiplicative qualities, where more dominant structures compensate for weaker ones in the creation of an overall mastery climate. These aggregated findings are important, as they suggest a redundancy of some TARGET structures in explaining the existing motivational climate. Coaching practitioners should therefore pay particular attention to the authority, recognition and evaluation structures, and how they can utilise these in order to: (a) increase the likelihood that a mastery climate is fostered, or (b) compensate for other TARGET structures that may reinforce performance-involved criteria.

In contrast to the positive effects observed when a mastery motivational climate was developed, problems arose for coaches on those occasions where more performance-involved criteria were prevalent. As Roberts (2012) articulates, the availability of information that permits social comparison is not necessarily an issue, rather, when reinforced, it can promote demotivating effects. For example, when normative ability comparisons were emphasised (even indirectly, through coach discourse) players often displayed less adaptive behaviours,

such as fear, doubt, frustration, and cheating. Similarly, coaches displayed more frustration and anger, their tone changed, and they adopted a more autocratic coaching style. One of the primary contributors to these effects were conflicting messages regarding criteria for evaluating success within a practice. When an incongruence existed between the organisation of the task and coach discourse, there appeared to be a high degree of unpredictability in the resultant actions of the players. These observations suggest that the motivational climate may be more predictable with saliency between the aims of the task, the coach's discourse, and coaching style used to communicate how to demonstrate competence.

One explanation for the incongruence (with respect to TARGET structures) between task organisation and coach discourse, are attempts by coaches to intentionally promote social comparison, particularly for the older groups. Analysis of the observations suggests that, even when organisation of tasks align with self-referenced criteria for evaluating competence, mastery and learning are not always emphasised explicitly. Rather, coaches might more readily recognise player mistakes (through physical penalties or public negative feedback), compare players publicly, or publicly evaluate players against the ideal professional player. In many instances when attempting to mimic the environment of professional football, the coaches appeared to overcompensate in this regard, and consequently created a hostile, disempowering environment similar to those that have been documented previously (e.g., Cushion & Jones, 2006; Owusu-Sekyere & Gervis, 2016). Whilst simulated environments are designed to effectively prepare players for the professional game (Finn & McKenna, 2010; Mills et al., 2012), this current study suggests that many players responded negatively to these situations. While it is clear that some individuals function well within a performance-involved climate, observations indicate that, when perceived competence diminishes or is questioned, individuals are more likely to display undesirable behaviours, and adopt less adaptive motivational strategies, such as:

seeking easier tasks, reducing effort, or giving up when tasks become particularly challenging (Roberts, 2012). Although each British football academy arguably has its own sub-culture, academy practitioners should be mindful of the motivational and behavioural implications of a culture which seems accepting of hostile and disempowering methods to try and develop professional players.

For coaches, balancing the need to create an environment that, on one hand prepares players for what may lie ahead in the professional game, yet equally facilitates the personal development of youth players, represents a significant challenge. On those rare occasions they consciously tried to simulate a professional football environment, the coaches informally expressed the difficulties of managing these twin-objectives. The observations clearly show that strategies associated with promoting a mastery motivational climate led to more adaptive behaviours than any attempt to create (deliberately or inadvertently) a performance climate. The difficulties experienced by the coaches appears to reflect a less nuanced understanding of how to maintain an adaptive motivational situation, whilst giving players meaningful experiences of performance-involved environments. Coach education courses might be an effective mechanism to help coaches influence the motivational climates of football academies. The academy coaches observed in this study, for example, attended the Football Association (FA) Youth Module – ‘developing the player’ which has the potential to influence their mastery-involving behaviours (e.g., through feedback). Given the challenges of managing an environment where social-comparison is rife and sometimes inadvertently promoted, coaches may be best served through educational support, which gives clear direction in the creation of a mastery-involved motivational climate, and which recognises the importance, and permits opportunities to illustrate the motivational threats of an environment promoting social comparison. The overarching aim has to be, to prepare coaches to constructively support and manage their players’ competence perceptions in any

motivational environment. Through this type of educational programme, practitioners could better prepare their players to experience a range of psychological environments, and protect them from (a) athlete burnout (Hjalm, Kentta, Hassenan, & Gustafsn, 2007), (b) fear of failure (Sagar, Busch, & Jowett, 2010), and (c) the development of perfectionist attitudes (Barkoukis, Koidou, & Tsorbatzoudis, 2009); all of which have been associated with unsupported, frequent exposure to performance-involved climates (Roberts, 2012).

Limitations and Future Directions

There has been a considerable amount of research exploring TARGET as a concept and its application in educational and sport contexts. There has however, been limited work within an elite youth sport context. With the potential financial rewards available to professional players, and the high level of attrition of young talent, a greater understanding of how practice structures and coach behaviours influence the psychological environment perceived by players is critical; no less so are the implications for immediate and long-term motivation. The current study, while illuminating in terms of the influence of TARGET structures on motivational climate, is not without its limitations. Broadly speaking, these revolve around the inferences made regarding athlete perceptions, and the moderating influence of coach actions, style of questioning, non-verbal communication, and their specific knowledge. Before exploring these in detail, it is important to recognise one of the key strengths of this research.

In addition to adopting a novel approach in a challenging elite sport environment, the embedding of a member of the research team we would suggest is a privileged and seldom acquired position within an elite soccer academy. Furthermore, in fully briefing players and coaches from the outset (of an extended period of observation), it allowed the researcher to become immersed and accepted as a credible part of the social fabric of the academy, and thus to conduct a refined examination of the coach-athlete interaction. Nevertheless, while

the research team followed a rigorous process in terms of linking organisation and discourse to the TARGET structures, followed by a reflective process to manage potential inconsistencies, the results must be considered in the context of observational research which, in this case, relied on one person's perspective in the recording and initial interpretation of pertinent incidents. Further research should continue to ensure that observer-bias is minimised in such designs through the use of established, systematic data processing, and reporting of results in a manner that accurately reflects observations, and where any inferences are grounded in theory and previous research.

Motivational climate describes the contextual factors that moderate an individual's perception of competence. It is clear that there is a conceptual tension with making inferences about individual perceptions. Nevertheless, we contend that detailed understanding of the environmental predictors and behavioural correlates of mastery and performance motivational climates across multiple studies in sport, enabled us to make informed judgements of climate in this study. Future research might consider the benefit of quantifying the relative effects of the structures on behaviours, although clearly an appropriate measure of TARGET structures would be required to make such evaluations.

The role of the coach is clearly central to predicting athlete perceptions of the psychological environment. Two important factors moderating the effects of TARGET structures are the subtle communication styles of the coach, plus their knowledge of how to manage the motivation of their charges. The use of rhetorical questioning is evident throughout the observations of coach-player interactions. The objective here would appear to be to promote reflection, and to give the players leadership roles and opportunities to make decisions. However, rhetorical questioning which is particularly leading may actually undermine decision making and reinforce coach authority, which in consequence undermines autonomy of the players. Clearly researchers need to consider this paradoxical effect when

interpreting the effects of actively engaging the players in problem solving. Similarly, there is potential for non-verbal communication to portray messages incongruent with the coach's verbalised discourse. There were a number of instances where the responses of players were associated more with the actions of the coaches, and less with what (if anything) has been said (e.g., calling the player's name and giving a "thumbs-up"). This is an under-researched area of motivational climate which could be illuminated by targeted observational methodologies.

Finally, the protracted period of observations raised a number of issues or potential confounds to the observations. To illustrate, there was a noticeable change in the feedback provided to players following coach attendance at the FA Youth Module course; the course educates practitioners on setting the right environment for youth footballers during training. Whilst our objective was not to evaluate the impact of a coach education course, such programmes can have a positive impact upon the behaviours of coaches, and thus motivational climate, even though they may not explicitly focus on TARGET. In congruence with the conclusions of Smith et al. (2007), the more knowledge that coaches have about how to effectively create mastery motivational climates, the higher probability that they will create adaptive environments for their players. Such effects may warrant the inclusion of TARGET or similar into central coach education programmes (i.e., FA coaching qualifications and the respective youth modules), which may have a larger, nationwide effect on creating appropriate psychological environments to nurture young elite footballers.

Conclusion

The current study provides an insight into the practice environment and coach behaviours that influence the motivational climate within a British football academy. A systematic review of diarised observations, and follow-up narrative, indicate that structural aspects of TARGET appear less critical than coach discourse in influencing the motivational

climate and associated behaviours of academy players. Further, empowering individuals to be part of the learning process is a key predictor of an adaptive psychological environment, whereas providing negative feedback in public promotes negative motivational consequences. The results indicate that practitioners should pay particular attention to the authority and recognition/evaluative aspects of their sessions in order to increase the probability of fostering an adaptive, mastery-involved motivational climate. This research also highlights the challenges for coaches to avoid contradictory messages regarding the criteria for evaluating competencies. A greater understanding of how to predict and manage threats to motivation will enable coaches to more effectively meet the aims and objectives of their sessions, while providing a constructive psychological environment for the players. Ultimately, it is hoped that achieving these objectives will promote the development of players more able to transition to the upper echelons of the professional game, whilst more effectively fulfilling the aims of sport organisations and supporting the broader psychological needs of those individuals for whom they are responsible.

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