

Keegan, R., Spray, C.M., Harwood, C., & Lavallee, D. (2010). The motivational atmosphere in youth sport: Coach, parent and peer influences on motivation in specializing sport participants. *Journal of Applied Sport Psychology*, 22, 87-105.

Abstract

This study qualitatively examined the motivationally relevant behaviors of key social agents in specializing sport participants. Seventy-nine participants (9-18 years old) from 26 sports participated in semi-structured focus-groups investigating how coaches, parents, and peers may influence motivation. Using a critical-realist perspective, an inductive content-analysis indicated that specializing athletes perceived a multitude of motivationally-relevant social cues. Coaches' and parents' influences were related to their specific roles: instruction/assessment for coaches, support-and-facilitation for parents. Peers influenced motivation through competitive behaviors, collaborative behaviors, evaluative communications and through their social relationships. The results help to delineate different roles for social agents in influencing athletes' motivation.

The motivational atmosphere in youth sport: Coach, parent and peer influences on motivation in specializing sport participants

Motivation in sport is the key determinant behind every action taken and every effort exerted (or not) (Deci & Ryan, 2000) and understanding the dynamics of motivated behavior in sport is arguably vital. Whilst important aspects of an individual's motivation are determined by their own beliefs, cognitions and values, significant influences can also be exerted by key social agents (Deci & Ryan, 2000) and it is these social influences that form the focus of this study. Over the last 25 years, a considerable volume of research has been generated attempting to conceptualize and measure these influences, particularly from coaches (a review of this body of literature is presented in Harwood, Spray & Keegan, 2008). In the current study, a broader focus was adopted, examining the wide array of potential motivational influences originating from coaches, parents and peers. As such, the term *motivational atmosphere* was chosen to reflect this broader, more detailed description.

Athletic career progression

Both Côté, Baker and Abernethy (2003) and Wylleman, Alfermann and Lavallee (2004) proposed models of athletic career progression. In each case, the early career is characterized by participants who are generally prompted to try a number of different sports to see if they either enjoy it, have some talent, or perhaps both. This period is termed the *initiation/sampling* stage (Côté *et al.*, 2003; Wylleman *et al.*, 2004). Following this period, athletes tend to focus on one or two sports in which they specialize, learning the key skills, tactics and rules. This *specializing* phase tends to occur from around the age of 11-12 years. Athletes at this stage have three possible outcomes: they can seek to invest and develop into elite performers, compete at a recreational level, or retire from the sport. The next developmental stage is termed *investment / mastery* (Côté *et al.*, 2003; Wylleman *et al.*, 2004) and can begin from approximately 15 years of age, depending on the sport. This stage can either be considered to continue until retirement (Côté *et al.*, 2003), or it can take the performer to a state of maintenance (Wylleman *et al.*, 2004). The specializing career stage is difficult to delineate with any precision, as it is

characterized by change. These changes include: a) decreasing number of sports/activities b) a decrease in deliberate play, being replaced with deliberate practice, and c) gradual changes in the roles of coaches (from helper to specialist), parents (from direct to indirect involvement) and peers (from stimulation/co-participation towards the fulfillment of emotional needs - Côté *et al.*, 2003). In contrast, the investment/mastery stage is defined by a heavy and exclusive focus on deliberate practice, specialist coaching in a single sport, and markedly decreased parental involvement (Côté *et al.*, 2003). This paper addresses the specializing stage of development.

Motivational climate research

Within achievement goal theory (AGT - Nicholls, 1989), sport participants' immediate goals for achievement are determined by the interaction of their *goal orientation* (a proneness in individuals towards adopting certain goals), with the *situational goal climate* (the specific situational and contextual circumstances in which the achievement task is defined - Ames, 1992). The dichotomous AGT approach proposed by Nicholls defines these goals in one of two ways: *performance/ego* goals emphasize normative evaluations and outperforming others, whilst *mastery/task* goals emphasize effort, personal improvement and task mastery. The presence of task goals has almost invariably been associated with positive motivational outcomes, whereas the presence of ego goals is hypothesized to produce an array of less desirable outcomes, especially when perceived competence is low, or where not accompanied by task goals. However, results regarding the adoption of performance/ego goals have been less consistent (for reviews, see Elliot, 1999; Harwood *et al.*, 2008).

Theoretical and empirical research has led to the development of the TARGET acronym, outlining the ways in which teachers and coaches can emphasize achievement goals: task, authority, recognition, grouping, evaluation and timing (Ames, 1992). A task-climate would include collaborative tasks, democratic leadership, recognition for effort/improvement, mixed ability groupings, private and individual evaluation, and sufficient time for everyone to learn. An ego-climate would include competitive tasks, autocratic leadership, recognition of normative ability, segregation by ability,

normative and public evaluation, and time for only the more advanced students to complete a task. In most coaching environments, however, the above behaviors are likely to occur interchangeably depending on the circumstances. Extensive questionnaire-based research has revealed that a perceived mastery climate correlates with positive outcomes, whereas perceptions of a performance climate either show no such relationships, or correlates with negative outcomes (e.g. anxiety and tension, or reduced enjoyment – see Harwood *et al.*, 2008 for a review). Given such a compelling body of research, relatively consistent findings and such a parsimonious theoretical model, it may not be surprising that AGT has dominated research for over twenty years. However, can something as complex as the ever-changing social milieu in which developing players participate be comprehensively represented by such a parsimonious model?

Stepping beyond 'motivational climate'

Within self-determination theory (SDT; Deci & Ryan, 2000), competence, autonomy and relatedness are conceptualized to be core psychological needs. SDT denotes that the degree to which any context, situation or relationship supports these needs would directly predict an athlete's level of motivation. Whilst AGT chiefly concerns the pursuit of competence (Roberts, 2001), Stuntz and Weiss (2002) argue that sport is often highly public and therefore inherently linked with social considerations, so that athletes' perceptions of physical competence may well be intertwined with certain socially-oriented motives. Allen (2003) proposed a theory of social motivation in sport that focuses upon an athlete's desire for social competence in achievement settings, defined in terms of the forming of friendships, gaining social status and recognition, and the perception of belonging to a group (see also Ullrich-French & Smith, 2006). Urdan and Maehr (1995) called for the reconsideration of social goal orientations (after their initial inclusion in AGT) in describing and explaining achievement behavior. Historically, social goals may include social welfare goals (i.e., to benefit the larger society), social responsibility (i.e., to be conscientious), social affiliation (i.e., to feel a sense of belonging), and social status goals (Urdan & Maehr, 1995; Wentzel, 1993).

However, the story becomes more complex when it comes to the joint consideration of these various theories. AGT is sometimes taken to overarch all of the above considerations, such that in Vazou, Ntoumanis and Duda's study (2005), themes consistent with relatedness and autonomy considerations (from SDT) were deductively subsumed into the conceptualization of a task-involving climate. This arguably overlooked the possibility that these themes might be related to both task- and ego-involving climates. The difference between achievement goals and social goals is also an area of tension, with some theorists preferring to subsume social goals into the ego-goal conception (Roberts, 2001), whereas Urdan and Maehr (1995) argued that the separate consideration of social goals significantly increases understanding and predictive power. However, Elliot (1999) proposed that AGT should be limited to an exclusive focus on competence, excluding any consideration of self-presentational or social status concerns. Despite this dissonance, there is also some convergence. All of these theories of motivational regulation have been linked with differences in levels of self-reported intrinsic/extrinsic motivation (Barkoukis, Thøgersen-Ntoumani, Ntoumanis & Nikitaras, 2007; Kavussanu & Roberts, 1996; Smith, Ullrich-French, Walker, & Hurley, 2006) and, despite the dominance of AGT in investigating the motivational climate, research adopting other theories has frequently and fruitfully addressed interpersonal and social considerations, such as relationships (Mageau & Vallerand, 2003; Ullrich-French & Smith, 2006), autonomy support (Conroy & Coatsworth, 2007; Gurland & Grolnick, 2005; Pelletier, Fortier, Vallerand & Briere, 2002), peer-friendships and group considerations (Allen, 2003; Weiss, Smith & Theeboom, 1996), and the emphasis of approach-or-avoidance motivation by significant others (Barkoukis *et al.*, 2007; Church, Elliot & Gable, 2001; Elliot, 1999).

The above points reinforce the need to investigate the motivational atmosphere without an *a-priori* commitment to using one-or-another model of motivation to guide analysis and/or interpretation. All the theories described here, as well as their various derivations/combinations, are arguably relevant to the study of social and environmental motivational processes. The critical-realist approach adopted

in this study denotes that none of these competing theories should be given any preference, especially prior to engagement with the subject matter: a kind of theoretical agnosticism advocated by Henwood and Pidgeon (2003). This absence of a guiding theory is best understood as an *open mind* rather than an *empty head* (see also Sandelowski, 1993).

Deconstructing 'motivational climate'

As already noted, recent studies have started to examine the social and environmental influences on motivation without exclusively focusing on the AGT conception of a motivational climate. These studies suggest researchers should incorporate more of a multifaceted approach to progress our understanding, even calling for a deconstruction of what constitutes the motivational climate (Amorose, 2007; Smith, Smoll & Cumming, 2007). This shift has occurred in recognition of the idea that the specific behaviors of coaches, parents and peers each influence athletes' motivation, and that these behaviors may have different influences between contexts, situations and developmental levels. Keegan, Harwood, Spray, and Lavallee (2009) identified specific aspects of coach, parent and peer behavior that sampling (initiation) athletes reported to be motivationally-relevant. Their data suggested that firstly, young participants were quite aware of how these social agents affected their motivation, and secondly, there was a vast array of behaviors and interactions that were reported to be motivationally-relevant. Prominent in their findings was the idea that the influences of social agents were related to the specific roles they fulfill (teaching, supporting, co-operating). The analysis indicated that the way a coach influences motivation related most strongly to the manner in which they perform their roles of instruction and assessment, whereas parents' influences were most salient in terms of the way they supported participation and learning. Parents and coaches were reported to be influential in terms of their leadership styles, affective responses and pre-performance behaviors. However, where coaches and parents performed different roles (e.g., coaches teaching, parents supporting), their sources of influence differed too. Peers were perceived to influence motivation via competitive behaviors, collaborative behaviors, evaluative communication and through social relationships (Keegan *et al.*,

2009). With specific regard to specializing athletes, Vazou *et al.* (2005) identified a wide array of peer interactions that could be viewed as motivationally relevant. When considered alongside other studies (e.g., Beltman & Volet, 2007; Garcia-Bengochea & Streat, 2007; Weiss, *et al.*, 1996), one can construct an initial overview of ways that peers reportedly influence each other's motivation, including: emphasizing effort, emphasizing competition, collaboration, evaluative comments, conflict (and its resolution/absence), emotional/moral support, and friendships/group-membership. Likewise, recent studies have examined the roles of parents in more detail, identifying such behaviors as additional coaching/instruction, feedback, emotional responses, autonomy support, controlling behaviors, maintaining focus, and social support (Gould, Lauer, Rolo, Jannes & Pennisi, 2008; Holt, Black, Tamminen, Mandigo & Fox, 2008; Holt, Tamminen, Black, Mandigo & Fox, 2009) as well as the conditionality of support (i.e., whether parents emphasize a return for their investment or assure the athlete that their support is unconditional - Assor, Roth & Deci, 2004; Gould *et al.*, 2008). These exploratory studies would appear to facilitate the dismantling of the socio-environmental influences on motivation, which was called for by Amorose (2007) and Smith *et al.* (2007), but what is missing from this research is a comprehensive and integrated description of the behaviors/interactions that athletes perceive to influence their motivation. Given the pivotal importance of the specializing career stage in both producing elite athletes and maintaining active and healthy lifestyles, this study set out to identify those behaviors of coaches, parents and peers that specializing athletes perceive to be motivationally relevant.

Method

Participants

Following ethical clearance from a British University, 12 focus group interviews were conducted containing 79 sport participants (36 females and 43 males), recruited from 26 sports with an age range from 9.0 years up to 18.16 years ($M = 12.93$, $SD = 1.82$). Seventy-seven of the participants were white European, one was of Asian, and one was of African descent. The participants were recruited from two

local schools, one Premiership soccer academy and one martial arts club. In each case, the head teacher, director or instructor was contacted by letter explaining the study, and requesting permission to interview participants. In the case of the secondary schools, students were requested to take part if they played sport in their spare time, outside of school PE. Participants under the age of 18 (n=78) took a parental consent form home and, if consent was granted, they were taken out of class/practice and interviewed nearby. Sport experience ranged from those with 2-3 years experience up to and including 5-6 years experience. Forty-two participants were competing in a single sport, 22 competed in two, and 15 reported competing in three or more sports.

Using Côté *et al.* (2003) model of career development, a maximum variability theoretical sample (Lincoln & Guba, 1985) of specializing athletes was sought with the following criteria in mind: a) career length (in main sport) over 2-3 years, b) beginning to focus on one/two main sports *outside of school PE*, and c) training regularly (e.g., deliberate practice at least once a week during the sporting season). Whilst specializers are characteristically 11-16 years of age, this criterion was interpreted flexibly, such that 10 year olds training 2-3 times a week at a Premiership academy appeared in the same sample as 18 year olds playing hockey twice a week at their local club. This not only reflected the changing and varied characteristics of specializing athletes, but it gave a voice to all relevant participants, rather than excluding those who may not have met predetermined selection criteria. Thirteen participants were representing their county, 18 were selected to train with a Premiership soccer academy and three had attended trials to represent their country. The remaining participants were chosen by their schools from a gifted-and-talented register; identifying pupils who had been recognized for their sporting achievement.

Procedure

A focus-group approach was chosen in order to maximize the experience within each group and also to meet child-protection and ethical considerations. Focus groups are proposed to be highly appropriate in situations where the research is aiming to generate new ideas, language and applications,

and they can also help to embolden participants to offer their opinions (Greenbaum, 1998). All interviews took place at the school or training site and lasted 45-65 minutes. Participants took part under their own volition with no incentive offered by the interviewer. All interviews were conducted by the first author. A semi-structured interview guide (taken from Keegan *et al.*, 2009) was deployed although questions changed as themes developed between interviews. The interview guide was piloted several months previously and given to secondary school teachers who checked that it was developmentally appropriate. These processes highlighted the importance of flexibility in asking, explaining and following-up the questions so as to ensure all group members felt able to contribute. After a brief introduction and ice-breaking exercise, the main questions were intended to assess the influences (positive and negative) of coaches, parents and peers on motivated behaviors; including effort, persistence, task choice, focus, and enjoyment (cf. Roberts, 2001). Sample questions included: "What things can your [coach/parents/team-mates] do, or say to make you [want to play sport / want to try hard in your sport / enjoy your sport / focus on learning new skills / help you to keep trying, even when you're struggling]?" The interview finished with some summary questions such as: "If you could write a wish-list saying: 'To make me [come back every week / try my hardest all the time / really enjoy my sport] this is how you should be' What sort of things would go on that list?" and "What are the most important things we've mentioned here today?" The interview proceeded differently every time in response to the discussions and debates between participants. Participants were always encouraged to seek clarification if they were unsure. The sections relating to coaches, parents and peers were asked in a counterbalanced order between interviews to alleviate any effects of fatigue or boredom. Additionally, when addressing the influence of coaches, participants were instructed to focus on their coaches from organized sport and not their school teachers.

Participants were allowed to respond freely and debates were encouraged when participants had different perspectives. If questions intended for later in the interview were discussed this was also permitted. Probes were included to explore or focus on themes and questions-of-interest that arose

during or between interviews. Thus, while the interview was structured, there was flexibility in how questions were asked and followed up, allowing a greater depth of exploration and improved rapport.

Data analysis

The process of data analysis started after the first interview was completed with the interviewer reflecting on the responses given and sharing these reflections with the co-investigators, often arriving at new themes to explore. As a result of this process, the data gathered became increasingly focused around emerging themes and questions. The same eight-step procedure adopted by Keegan *et al.* (2009) was implemented to prepare and analyze the data: 1) transcribe interviews verbatim (yielding 358 pages of single spaced text), 2) read and re-read transcripts for familiarization (also listening to tapes), 3) divide quotes into those concerning coaches, parents and peers, 4) perform a thorough inductive content analysis, moving recursively between creating tags (öopen codingö), creating categories (öfocused codingö), and organizing categories, using constant comparison and critical reflection to guide analysis (cf. Côté, Salmela, Baria & Russell, 1993) within each domain using QSR N-Vivo version 7 qualitative analysis software (QSR, 2006), 5) inter-rater checking of the coding in a sample of manuscripts (>80% agreement ó cf. LeCompte & Goetz, 1982), 6) member checking via both internal (checking understanding during focus groups and returning scripts to ensure statements had not been misrepresented) and external (recruiting a new group of specializing participants to assess/discuss the findings) processes; 7) an iterative consensus validation process was conducted with two members of the research team to question codings, categorizations and the overall organization of the data, and 8) a peer debrief (cf. Lincoln & Guba, 1985) was conducted with the remaining researcher throughout the analysis as well as in review of the final analysis. Within the analysis process, all identified codes represented the interpreted meanings of the athletes' responses. The processes of private reflection, consensus validation and peer review were utilized to ensure that: a) code and category labels were represented in the data and not 'forced' upon it (cf. Charmaz, 2006), and b) the theoretical agnosticism, described in the introduction, was retained because each quote/theme/category

was compared in relation to both other data (i.e., constant comparison - Lincoln & Guba, 1985) and *all* of the potential theoretical standpoints. Existing conceptions were forced to *earn* their way into the analysis rather than *guiding* it (cf. Charmaz, 2006, p.68).

The iterative and recursive coding of properties, interactions and contexts/situations (processes) was carried out until no new information about a category emerged. The analysis focused on motivationally-relevant sources and forms of perceived influence. The most salient outcome of the analysis was the perception that *the motivational atmosphere is complicated*. This perception led to an analysis prioritizing breadth over depth in an attempt to identify as many contributing variables as possible. Space considerations prevent the full presentation of quotes and illustrations, but in an attempt to demonstrate the transparency and authenticity of the research, numerous quotes are presented and explicit links are made between the interpretive account and the findings of other related studies (Pawson & Tilley, 1997).

Results and preliminary discussion

With a view to highlighting the potential integration of coach, parent and peer influences, Figures 1 and 2 were constructed to highlight higher-order themes (HOTs) that showed strong correspondence between social agents. The results list congruent themes which related to all three social agents, then themes which showed similarities among any two social agents, and finally, the themes that appeared unique to one social agent. Where quotations are provided within the text, the participant's reference is given in the form [GENDER-AGE-SPORTS]. In order to provide a full and complete representation of the findings, whilst simultaneously attempting to offer sufficient explanation, all categories and themes that emerged from the analysis are presented in the figures, and (where appropriate) discussed in relation to existing research. These findings do not represent an attempt to generate a new theory, but rather they provide the fullest possible account of the motivationally-relevant indices in the *motivational atmosphere* such that subsequent theorizing may (eventually) be facilitated.

Coach, parent and peer commonalities

The concept of 'feedback' or 'evaluative communication' emerged separately in all three dimensions of the analysis (see also Figure 1). Overall, both coaches and parents were reported to influence the motivation of athletes through either verbal feedback (see also Conroy & Coatsworth, 2007, Reeves, Nicholls & McKenna, 2008; Holt *et al.*, 2009) or behavioral reinforcement (see also McCarthy & Jones, 2007; Gould *et al.*, 2008). Verbal feedback could vary in terms of its valence (praise-criticism) and its 'constructiveness'. Positive feedback was generally viewed as producing more adaptive forms of motivation, whereas negative feedback was more likely to undermine motivation, produce frustration, or even undermine the athlete's relationship with the feedback provider. 'If you're really upset that you've done badly, and you really want to improve on it, and they just like point it out and make it even worse like, by shouting at you... when you know already' [M-13.10-SOCCER]. In contrast, however, negative feedback was also reported as producing an *I'll show him* response, for example: 'It's not very nice when they criticize you but that makes you like [think] 'I'm gonna show them that I can actually do that... I'd be better' [M10D SOCCER ACADEMY].

In terms of the 'implicated conception of the nature of ability' a cluster of ideas were identified relating the Dweck's (1999) model, and the difference between ability being conceived as fixed (entity) or malleable (incremental). Constructive feedback was seen in positive terms, linking with an incremental conception of ability, whereas summative feedback was linked with feelings of frustration and undermined motivation, invoking as it did, an entity conception of ability:

[Mum]'s like 'no you weren't good enough'... But then I feel like 'well I've tried my hardest, and I can't do any better than that'. But then if my dad was there he'd be like 'you did really well in them matches, like 'concentrate on getting your skills right' It would make me feel a lot better that he was like trying to help me, rather than just telling me what I'm doing wrong.

[F-12.4-HOCKEY]

Coaches and parents were also reported to influence motivation by using behavioral reinforcement (rewards and punishments) in response to performances, outcomes and effort/attitude.

For example: 'If he like failed they just grounded him and stuff like that.... Like once he just missed out on getting selected but his mum and dad just went mental' [M-12.6-HOCKEY/LACROSSE]. In contrast, parents were also reported to offer 'unconditional praise', which was seen as a positive influence on motivation and the parent-child relationship, for example: 'Even when it's obvious that you're not gonna win they say 'Do your best, carry on. Don't give up!' and then afterwards they're like 'Well done! You played really well' so you feel like you haven't done so bad' [F-11.11-SWIM/NETBALL/SKI].

The nature of feedback and evaluative communication in the peer dimension did seem qualitatively different to the coaching and parent dimensions, as it included themes ranging from genuine feedback to momentary displays of frustration or joy. There were two emergent categories: 'immediate reactions to mistakes' could be subdivided into 'anger and criticism' and 'encouragement after mistakes' (e.g., 'If I duffed a shot or something, someone would just say 'Hard luck, still try and do it next time but do it better' Instead of just saying 'Oh that was rubbish' [M-13.0-SOCCER]. The second emergent category was labeled 'verbal commentary' and was further subdivided into 'praise and positive feedback' and 'criticism and negative feedback'. This verbal feedback was evident in both Vazou *et al.* (2005) and Beltman and Volet (2007) studies, and whilst it may differ qualitatively from the feedback offered by coaches and parents (less formal and authoritative - hence the label 'commentary'), it did involve the verbal expression of evaluative information.

Coach and parent commonalities

Leadership style: Both coaches and parents shared themes of 'controlling style', 'autonomy supportive style', 'expertise' and 'relationship aspects' as illustrated below and in Figure 1. Elements of these findings replicate those of Conroy and Coatsworth (2007) regarding coaches) and Holt *et al.* (2008; 2009) regarding parents), whilst other findings offer new possible themes.

Regarding both coaches and parents, autonomy support was generally reported as having a positive influence on motivation, whereas 'controlling style' was often reported in relation to feelings of frustration, anger, undermined motivation and even damaging relationships. An autonomy

supportive style included showing an interest, listening wherever possible (e.g., ‘‘They listen. Like if you’ve had a bad game, or you want to moan, they actually listen to you and don’t just go ‘whatever’’ [M-13.6-SOCCER]), supporting the child’s desires and allowing the athlete to participate in decisions (e.g., ‘‘If you’ve got a party, don’t say ‘Oh you’re not going to the party cos you’ve got training tonight’ Give them a choice’’ [F-15-SWIMMING]); whereas controlling style included making autocratic decisions, asserting control with threats/pushing (e.g., ‘‘His dad had kept pushing him and pushing him and he got like too hard on him and eventually he dropped out ‘cos he was just fed up of it’’ [M-13.2-RUGBY]), and parents trying to influence selection decisions on behalf of their child (e.g., ‘‘Parents asking the manager for them to play, and saying ‘Why aren’t my kids in the team?’’’ [M-15.2-RUGBY/SOCCER/ROWING]).

Elements of social motivation were apparent in the theme ‘‘relationship with athletes’’ (with coaches and parents). The importance of the athlete-coach and athlete-parent relationships was highlighted by many participants and is illustrated by quotes such as ‘‘When my father’s there... he’s the most important person in my life as far as I’m concerned, and when he’s there I always play better, I’m always so happy when he’s there’’ [M17.11-RUGBY], and ‘‘If you’re like inspired by your coach, you want to do it even more; like do it *for* them! But if you’ve got a horrible coach, you like just don’t feel like [doing] what they’re saying. [M-12.2-SOCCER/CRICKET]. In addition, the expertise of both coaches and parents seemed to play a role in the motivation of the athlete. This may be important as the specializing career stage is partially characterized by a shift towards specialist coaching (Côté *et al.*, 2003). With specific regard to the parents, ‘‘different parenting styles’’ suggested that each parent may have different effects on motivation, depending on their relationship with the child, experience of the sport, or affective style, and that this relationship might provide an interpretive context for any parent-athlete interactions (see also Holt *et al.*, 2008).

Emotional and affective responses: These were separated from such themes as ‘‘feedback and evaluation’’ as they did not always have an evaluative component, but reflected the tendency of the coach/parent to be ‘‘moody’’ or easily angered. The emergent categories within this dimension included:

a) propensity for anger (e.g., [regarding coach] “You know you've got to perform well otherwise they're gonna like, not be very happy” [M-12.1-BADMINTON]), b) positive affect (e.g., [regarding coach] “It makes the situation more positive so you feel you can play your best... So it is how the coach really puts it, the body language they use as well” [F-14.7-HOCKEY/SOCCER]), and c) “tolerance” which was reflected by acceptance, or the absence of a negative reaction, regarding mistakes and defeats (e.g., “Well my dad, he would never shout, he would just say ‘you need to improve’ you didn’t do this as well today” he would never shout” [M-10B-SOCCER-ACADEMY]). The emotional responses of coaches and parents (real and anticipated) appeared to be a key factor in influencing the participants’ motivation. Participants appeared to pursue positive emotional responses, appreciate tolerance, and try to avoid producing negative responses, such as anger or sadness. The observed and anticipated emotional responses effectively created an emotional climate around sporting involvement, separate from (but inherently related to) ideas of evaluation, approval and supportiveness. Studies by Conroy and Coatsworth (2007), Holt *et al.* (2009) and Gould *et al.* (2008) also alluded to these factors.

Pre-performance motivating behaviors: This theme represented the behaviors undertaken in the period immediately before competitive performance with the specific intention of motivating the participants. Both parents and coaches were cited as being able to promote effort/mastery (e.g., [regarding coach] “Before the match they tell you exactly what they want you to do... ..they tell you exactly what you need to do to be better in that position” [M-13.8-SWIM/SOCCER]), pressure/avoidance motivation (e.g., [regarding coach] “They’ll say that if you’re not doing your best they’ll bring you off and replace you” “í But sometimes it doesn’t work. It puts extra weight on your shoulders.” [M-15.2-RUGBY/SOCCER/ROWING]), and confidence/approach motivation. Coaches (but not parents) were cited as being able to promote competitiveness and intra-team rivalry, as well as passion and energy (e.g., “Say when you’ve got an important match and your coach is like revved up as well then it makes you like wanna try” [M-13.8-SOCCER/CRICKET]). Certain elements of this HOT have been noted in other recent papers (see Figure 1) but overall this theme may represent a potentially fruitful area for future investigation.

Coach-specific themes

Instruction and pedagogic considerations: This theme referred to the way the coach goes about the regular duties of coaching, such as teaching, planning and implementing drills, making selections, etc. (see Figure 2). 'Equal treatment and perceived fairness' was further subdivided into 'equal opportunities in selection' (i.e., allowing genuine competition for places), 'equality in feedback' (i.e., giving equal time to all players and also being equally positive/negative with all players), 'perceived unfairness in selection' (i.e., always picking 'favorite' players regardless of attendance at training or recent form) and 'differential treatment' (i.e., spending more time or being more friendly with 'favorite' players, asking a team to always pass the ball to one player). 'One-to-one coaching' related to the time spent by coaches giving instruction, attention, evaluation and feedback individually. This coaching behavior was construed as having a very positive influence on motivation.

'Task design' related to all aspects of the drills and practices that coaches organize during their practice sessions (see Figure 2). Fundamentally, the nature of the tasks that the athletes are asked to undertake was reported as having an influence on their motivation. As such, the category was subdivided into: a) 'creating competitions in practice' b) 'variety and fun' c) 'tasks focusing on results' (e.g., 'So you aren't really improving, you're just kind of looking to win the match and that's it... they all want to score goals but when we're under pressure we can't tackle' [M-12B-SOCCER-ACADEMY]), d) 'giving time to learn' e) 'tasks at optimal level' f) 'repetitious drills' and g) 'playing without teaching' for example: 'When like people don't understand how to play certain sports they don't teach them, they just put them in a low group... ...they [coaches] just can't be bothered to teach. [M-12.6-SOCCER/CRICK/RUGBY]. This theme was reconcilable with the Task criterion of Ames' TARGET, but it would also appear to expand upon it.

'Selection' was subdivided into: a) 'competition for places' b) 'consistent team selection' c) 'selecting on form' (e.g., 'Twice in a row I've not been chosen - because like the training before I've not been playing my best' [M-12.11-HOCKEY/SOCCER]), d) 'squad rotation' and e) 'nobody is secure' (e.g.,

“When they get like a triallist in, you’re thinking: “Is he better than me in my position, am I going to get dropped or something?” (M-11A-SOCCER-ACADEMY). The theme of modeling-demonstration was discussed sufficiently to warrant mention, as it seemed that even facilitating improvement/learning in this way was construed as motivational by some of the athletes: “They actually show you what you have to do, you see them doing it and they tell you how you can do it... so it helps you. (F-11.7-

NETBALL/ARCHERY/SWIM].

-Evaluation criteria emerged as a theme relating to how athletes felt they were evaluated by their coach. Athletes seemed able to infer how they were being evaluated without necessarily receiving feedback, and this was also reported to influence motivation. Coaches who generally emphasized effort, improvement and good skills were inferred to evaluate this way: “Well, when you normally lose a match you might play really good football [soccer] and they won’t criticize you at all if you were the better side” (M-10B-SOCCER-ACADEMY) and “Say if I, our team played really bad but we won, he would be more bothered that we played bad” (M-9A-SOCCER-ACADEMY). Likewise, it was possible for coaches to evaluate normatively, for example “Sometimes they even tell you like who the best players are, and then the best players are happy, and everyone else wants to catch up to them and do better than them” (M-13.10-SOCCER) and participants also reported being aware of when the coach was “fault-finding/scrutinizing” or looking for problems and weaknesses:

He was always watching me and he knows everything I do wrong... I’m with him so many times a week, so he knows all my little things and he looks at them to try and make them right... it always makes me cry cos like the pressure on me [because] he knows I’m gonna do something wrong and he picks up on it and writes it down (F-14.1-

FENC/ARCH/TAE-KWON]

The evaluation theme in this study concurs with Ames’ suggestions, but equally, it is more specific in identifying the evaluation criteria, as set against the feedback or actions resulting from these evaluations, as well as going beyond task versus ego constructs.

Parent-specific themes

Parent support and facilitation: This theme referred to the supportive role carried out by parents in transporting their children to training and competitions, purchasing equipment, and offering 'moral support' from the sidelines. The theme contained three subcategories. Firstly, 'material and emotional support' (e.g., 'She drove me there like every weekend, just for these trials, and I felt like quite proud, because I had a mum who cared about what I did' [F-12.4-HOCKEY]), which replicated findings by Garcia-Bengochea and Streat (2007) and Beltman and Volet (2007). Secondly, 'unconditional support' (e.g., 'Whatever I need she'll go out there and buy me it - she doesn't know what it's for or what it'll do, but she does it because it makes me happy' [M-17.11-RUGBY]), which was also consistent with findings from Assor *et al.*, (2004), Gould *et al.*, (2008), and Pummell, Harwood and Lavalley (2008). Thirdly, the mere act of 'watching-spectating' was also identified as motivationally-relevant (e.g., 'Some kids, their parents can't take them cos they don't have the time, so they have to go with other people's parents and it doesn't really feel like they're supporting you' [F-14.1-FENC/ARCH/TAE-KWON]).

Parent play-and-teach behaviors: This higher order theme described the activities and behaviors undertaken by parents aimed at developing or improving the athlete's competence. There were three emergent categories within this theme. 'Over-involved behaviors' was further subdivided into 'taking the game home', 'accepting reflected glory' and 'embarrassing behavior during competition' and replicated findings by Gould *et al.* (2008). For example: 'It's alright if they're there and being supportive, but if they're like shouting at you what to do or like being really over the top, then it gets really wrong' [F-13.5B-TENNIS/SOCCER]. 'Instructional behaviors' were further subdivided into 'conflicting advice to the coach', 'reinforcing coach's advice' and 'overloading with advice' in a manner synonymous with Gould *et al.* (2008), Holt *et al.* (2009) and Reeves *et al.* (2009). 'Facilitating practice' was further subdivided into 'garden play' and 'encouraging practice' where 'garden play' was analogized with free or deliberate play and this category also showed similarities with Garcia-Bengochea and Streat (2007), Babkes and Weiss (1999) and Pummell *et al.* (2008).

Peer-specific themes

Peer relationships and social interactions: The theme referred not only to the quality of relationships, but also seemed to suggest that relationships amongst peers can be used as a commodity to either endorse certain achievement motivations (i.e., the nature and dynamics of these relationships and the processes of their formation were commonly referred to as a mechanism by which affect, cognitions and goal adoptions could be influenced). There were three emergent categories: -Linking competence to social outcomes (e.g., 'Like if you get on well with them and you like do a really poor performance they like, don't wanna be your friend any more' [M-13.2-ROWING/CRICKET]), which was also identified by Allen (2003) and Vazou *et al.* (2005); -Friendship and affiliation (e.g., 'Good relationships... Like respect each other and like stick up for each other' 'make sure you all get on, cos if you don't, like, it's not gonna go well.' [M-15A-SOCCER-ACADEMY]), which was also identified by Weiss *et al.* (1996) and Vazou *et al.* (2005); and -Group identity and perceived belonging (e.g., 'It just makes you want to keep doing that, for them, for the rest of the team.... ...you've got another ten people on the pitch with you and you want to keep doing it for them' [M-13.8-SOCCER/CRICKET]). This theme was also compatible with those reported in Weiss *et al.* (1996) and Vazou *et al.* (2005). -Peer relationships and social interactions appeared to be the driving force behind many of the themes observed and consequences reported. For example, the giving and receiving of feedback, the decision concerning whether to help a peer improve (or not), or to be competitive (or not), all seemed to be considered in relation to social outcomes (e.g., status, belonging, affiliation). This was only partially reflected in themes such as 'linking competence with social outcomes', but the distinctions between 'discriminatory'-versus-'inclusive' playing style, and 'conflictive'-versus-'positive' rivalries also implicate social consequences for competence/achievement-based behaviors. Whilst such a finding is not unique (Skinner & Piek, 2001), it appears to be important and worthy of further investigation.

Competition amongst peers: This theme referred to any and all behaviors relating to competition and normative comparisons and contained many concepts that appear to replicate the findings of Weiss

et al. (1996) and Vazou *et al.* (2005). Whilst several of the emergent categories could be linked to conflict and negative outcomes, there were themes suggesting positive outcomes, and also suggesting how normative comparisons can be emphasized by a peer group. This higher order theme contained six emergent categories: a) 'boasting' (e.g., 'If somebody in the team is showing off and stuff, saying 'I'm the best, I'm better than you', then you like want to be better than them, you want to beat them' [F-13.4-RUNNING/EQUEST]), b) 'pressurizing behaviors' (e.g., 'If you've got a penalty, and you're the person taking it, and they're putting loads of pressure on you, saying 'oh you've got to get it in', it makes you feel like, 'What if I get it wrong?' [F-13.5B-TENNIS/SOCCER]), c) 'leading by example' (e.g., 'I think they help you by being better than you. Because that's showing you that if they can do that then you can do that as well' it makes you think 'I'm going to do that too' [F-11.7-NETBALL/ARCHERY/SWIM]), d) 'rivalry and conflict' e) 'positive rivalry' (e.g., 'You try and be better than them, and they try and be better than you, and then it makes you be better players because you're always like under pressure, but that's good' [M-12.6-SOCCER/CRICK/RUGBY]), and f) 'discriminatory decisions and behaviors' which involve actions such as refusing to pass the ball to an individual.

Peer collaboration and altruistic behaviors: This theme referred to all behaviors involving peers working together or to help each other. As above, the HOT 'peer collaboration and altruistic behaviors' contained many similarities with Weiss *et al.* (1996), Vazou *et al.* (2005) and Garcia-Bengochea and Streat (2007). The emergent category 'emotional and moral support' referred to behaviors where peers sought to support each other without necessarily having the aim of improving performance. Examples would include consoling, cheering, distracting someone from nerves, and making pacts to remain friends regardless of who wins. The emergent category 'emphasizing effort' referred to behaviors wherein peers de-emphasized results and even performance failures and, instead, encouraged effort and participation. Examples could include such statements as 'never mind keep trying' or remaining patient while a peer attempts to master a skill. The theme 'collaborative learning' referred to attempts by peers to teach each other or practice together. Within this theme, four

subcategories emerged: a) 'offering help and advice' (e.g., 'If you're struggling with a routine or something they will stay and help you, so it's like looking out for each other' [F-12.7-SOCCER]), b) 'withholding help and advice' (negative case) (e.g., 'Like if you ask them for help and they just ignore you' [M-13.4-RUGBY]). c) 'extra practice in spare time' (e.g., 'We go down to the park, like after and just have a kick around' [M-13.8-SWIM/SOCCER]), and d) 'collaborative playing style' (e.g., 'At our county trials... this girl I knew that I was playing on the same team with, we thought like 'oh we'll play together and get through'... ..like she would always pass to me.' [F15-NETBALL/EQUEST]).

General discussion

This study set out to produce a detailed and integrated description of the motivationally-relevant behaviors of coaches, parents and peers when supporting specializing sport performers. The focus groups offered pertinent and rich data facilitating a comprehensive understanding of the specific behaviors that social agents may display in influencing the motivation of specializing athletes. As discussed already, there are encouraging similarities with existing research (which largely uses the athletes from the specializing career stage), as well as potential avenues for new research and theoretical discussion throughout the findings. The coaching findings replicate and extend the TARGET framework of Ames (1992), as well as sharing commonalities with other exploratory studies of coach influences on athlete motivation (Conroy & Coatsworth, 2007; Garcia-Bengoechea & Streat, 2007; McCarthy & Jones, 2007; Reeves *et al.*, 2009). The parent findings show good similarities with both the coaching findings and also with existing research into parenting styles and influences (e.g., Gurland & Grolnick, 2005; Gould *et al.*, 2008; Holt *et al.*, 2008; 2009). The peer motivational climate suggested many of the same considerations as Allen (2003), Vazou *et al.* (2005), and Weiss *et al.* (1999). This observation of similar behaviors and situations in separate studies offers potential for theoretical convergence.

In comparing the data from this study to Keegan *et al.* (2009), which used the same methodology with athletes at the initiation/sampling career stage, a similar pattern of higher-order themes was

apparent. This suggests consistencies between the motivational influences perceived by initiators and specializers, which is arguably cogent for the following reasons: firstly, the objectives of both stages are comparable (e.g., maintain interest, learn and improve, recreation 'with an eye for potential'). Secondly, the roles performed by coaches and parents are common. Thirdly, the relationship between athletes and the parent/coach is also similar, insofar as coaches and parents remain in a position of authority, responsibility and high esteem during both stages. During the later investment/mastery stage, the emphasis may change to achievement and performance, athletes are likely to be more self-reliant (able to live alone, drive, provide for themselves) and self-aware, and the relationships may change to become more equal, which might lead one to expect more noticeable differences in the motivational atmosphere that these athletes would report. However, the specializing athletes in this study provided more detailed descriptions within similar themes/categories (perhaps due to increased eloquence and cognitive maturity in these older athletes), and also suggested a greater emphasis on skill acquisition, achievement and competition, which would be consistent with advances in career-stage and an increasing focus on skill development (Côté *et al.*, 2003). However, this study does provide detailed and internally/externally consistent descriptions of the behaviors by which social agents can influence motivation (both immediately and over time); by encouraging continuity between play and work (cf. Côté *et al.*, 2003). Overall, the findings from this study appear highly compatible with Côté *et al.*'s model and may offer additional insights for coaches and practitioners working with specializing athletes.

Like the Keegan *et al.* (2009) study, the roles performed by social agents, and the manner in which these roles are fulfilled, emerged as the most parsimonious way of organizing the analysis. For example, all three social agents produced a theme synonymous with 'feedback', and whilst the content of this was slightly different for peers, there were noticeable similarities between 'coach feedback' and 'parent evaluative behavior'. Parents and coaches showed the strongest similarities, with 'leadership style', 'evaluative behaviors/feedback', 'emotional and affective responses' and 'pre-performance

motivating behaviors all emerging in both dimensions and showing good consistencies. These similarities are most likely indicative of an overlap in the *types of roles* performed by parents and coaches, in that they may exert similar motivational influences as a result of performing functionally analogous tasks and roles (e.g., support, facilitation, instruction, care-giving). However, where social agents perform unique roles, their influences are unique too; for example, the manner in which the coach performs the key roles of instruction, selection and management (collaboratively, positively, tolerantly) can all impact upon athlete motivation. In contrast, the role of parents revolves heavily around support and facilitation, and the manner in which this support is provided (unconditionally, positively, collaboratively) also appeared key. The role of peers revolves around friendship, cooperation, and the reinforcement of rules/values amongst the peer group. Once again, the manner in which this role is fulfilled (narcissistically, altruistically, tolerantly) was central in determining athlete motivation. As the athletic career progresses, these roles are likely to change (Cote *et al.*, 2003) and in order to plan successful interventions and build understanding, these changing roles and their integral links to motivational influences must be appraised.

In this paper and several others (e.g., Garcia-Bengochea & Streat, 2007; Keegan *et al.*, 2009), the emergent picture of social and environmental influences on motivation has not been a dichotomy between performance-versus-mastery definitions of competence, or approach-versus-avoidance motivational valences. Instead, a rich plethora of motivational influences has emerged, containing competence *as well as* social goals and autonomy goals, supported and endorsed (or undermined) by key social agents across a variety of contexts and situations.

Another key finding was that individual behaviors (and broader themes) from coaches, parents and peers were rarely associated with a consistent motivational impact. For example, depending on the respondent, the source and the context, criticism was associated with reduced motivation, anger/frustration, avoidance-based motivation, improvement/mastery (or increased effort), and thwarted autonomy. These findings suggest that the relationship between the behaviors of social agents

and their impact on motivation was moderated by a number of contextual, interpersonal and intrapersonal factors (cf., Elliot, 1999). Thus, in a manner that replicates Keegan *et al.* (2009), there appeared to be a complex interactivity between motivationally-relevant behaviors and their impact on motivation. To be clear, as a rule it was almost impossible to establish any direct and exclusive correspondence between the behavior of a coach, parent or peer and the impact on athlete motivation. The influence of any single motivationally-relevant behavior seemed to be moderated by other factors, such as: a) the behaviors immediately preceding the event, b) co-occurring behaviors - e.g., "not what you said, it's the way (or moment, or place) you said it", c) the consistency of the behavior in relation to the person concerned and in comparison to others, d) the relationship between the athlete and protagonist, and e) other contextual or environmental variables (e.g., training vs. competition or stage-of-season). This could be viewed as a first step towards deconstruction of the motivational climate (or "atmosphere"), called for in studies such as Smith *et al.* (2007). Elliot (1999) also speculated: "it is also possible that some of the antecedent variables combine together to jointly and interactively predict achievement goal adoption" (p.176). The closest thing to an exception regarding the above "rule" was the theme of positivity. Ideas surrounding positive feedback, positive affect, positive pre-competition talks (pep-talks), encouragement, collaboration/support, and fun (e.g., in training) permeated the analysis and were consistently associated with positive effects on athlete motivation. Among specializing sport performers, where a key aim is to encourage athletes to view deliberate training as more intrinsically rewarding by allowing continuity between play and work (cf., Côté *et al.*, 2003), considerations of positivity should be central even if this is accompanied by a focus on technical proficiency.

The current findings provide evidence that all theories of motivation reviewed in the introduction are relevant to the study of social and motivational influences on motivation. Not only are these various constructs evident, there were suggestions that they may interact, such that, for example, relatedness might be used to incentivize competence (cf. Wentzel, 1993), or autonomy-support might contribute to

an improved relationship (cf. Gurland & Grolnick, 2005). It is possible that with carefully designed research studies, the complex interplay between competence, relatedness and autonomy needs, as indicated in this study, might begin to emerge.

Recommendations and implications

The critical-realist approach in the current research cautions against the influence of having a single dominant paradigm/theory guiding the exploration and analysis of the motivational atmosphere. Duda and Whitehead (1998) expressed concerns related to the wide range of questionnaires assessing motivational climate purely from a dichotomous AGT perspective. Hence, the findings of this study may be used to inform a series of broader studies assessing the precise impact of coach, parent and peer behaviors. Such studies may help to determine the relative importance of each social agent, they may give us the ability to establish which aspects of an intervention are the most influential in effecting motivational outcomes (Smith *et al.*, 2007), and they may enable researchers to compare the observed behaviors of social agents with what the athletes perceive. This work would enable practitioners and researchers to: a) offer appropriate insights into adaptive and maladaptive contextually-relevant behaviors, b) educate coaches and parents about the effective management of peers in their sessions, and c) work directly with specializing athletes on the development of an effective peer-related atmosphere. Hence, from the perspective of applied intervention research, this study encourages practitioners and academics to devote time to studying themes and behaviors across social agents in a manner that will enhance the content of educational programs. In combination with other studies (e.g., Conroy & Coatsworth, 2007; Garcia-Bengochea & Streat, 2007; Gould *et al.*, 2008; Holt *et al.*, 2008; 2009; Keegan *et al.*, 2009; McCarthy & Jones, 2007), this research builds a picture of motivational influences across the developmental trajectory of athletes' careers, which should ultimately enable the design of training environments that encourage enjoyment, participation, persistence and improvement – whether or not athletes progress to the elite level or simply maintain a recreational interest.

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