

Norwegian Football Academy Players-Players Self-Assessed Competence, Perfectionism, Goal Orientations and Motivational Climate

Eirik Nerland and Stig Arve Sæther

Norwegian University of Science and Technology, NTNU, Department of Sociology and Political Science, Trondheim, Norway

ABSTRACT

Grounded in the theoretical framework of achievement goal theory and perfectionism theory, the purpose of this study was to examine how self-assessed perceived abilities covaried these variables among Norwegian football academy players. 140 adolescent football players participated, representing three football academies. Perceived competence was reported as equivalent to or better than others. Perfectionism scores showed personal standards as the highest of the dimensions of perfectionism, while perceived parental pressure was lowest. In contrast, mean task orientation and perceived mastery climate were higher than ego orientation and perceived performance climate. The correlation analysis showed that perceived competence correlated positively with personal standards. Personal standards correlated positively with the rest of the perfectionism dimensions as well as ego orientation, perceived mastery- and performance climate. Concern over mistakes was positively correlated with ego-orientation. Overall, findings suggested that personal standards correlate with perceived competence, while these variables also relate to other perfectionism dimensions, goal orientations and perceived motivational climate. Therefore, coaches should highlight the importance of high personal standards, as a potentially maladaptive function on talent development.

Key words: talent development, perceived competence, perfectionism, goal orientations, motivational climate

Introduction

Talented football players are expected to be highly motivated in order to be able to develop into future elite level players. This motivation should nurture the players' ability to undertake frequent training (Ericsson, Krampe, & Tesch-Römer, 1993), be able to successfully self-regulate (Toering, Elferink-Gemser, Jordet, & Visscher, 2009) and hold the right attitudes (Sæther, 2014) regarding their own development. In order to foster talented young players, football academies have become an important development arena. Being part of a football academy environment is associated with many advantages, i.e. high-level coaches, training facilities (Ashworth & Heyndels, 2007), potentially increasing the motivation to continue training for a professional career.

Even so, academy players will encounter a range of personal and interpersonal challenges that might affect their development (Richardson, Gilbourne, & Littlewood, 2004). Two common challenges are the high expectation environment the players are a part of involving considerable personal pressure especially from coaches. Several researchers have underlined the importance of high quality coach-athlete relationships in order to reduce stress, improve performance and enjoyment of competitive experiences (Kristiansen & Roberts, 2010). Similarly Rodahl et al. (2015) highlight the quality of the coach-athlete relationship as a significant factor in enhancing mental toughness, which may subsequently increase the athlete's ability to cope with stress (Nicholls, 2011). However, even if the coach is the most important supplier of a stable and predictable social environment, the players are also faced with their own expectations. The players are therefore dependent on the ability

to assess their own skills and abilities (Kannekens, Elferink-Gemser, Post, & Visscher, 2009), even if they constantly are assessed by their coaches.

High standards have been integrated into large parts of the world of sports. Perfectionism is a personality construction, which has been related to several types of maladjustments. Frost et al. (1990), described perfectionism as individuals' tendency to set unrealistically high standards of performance, distinguish perfectionists from those who are highly competent and successful. Hamacheck (1978) argued that perfectionism is a bidimensional concept, and drew a distinction between normal (adaptive) and neurotic (maladaptive) perfectionism. Adaptive perfectionism is characterized by high personal standards of achievement and getting pleasure from getting the work done. Adaptive perfectionists are also capable of choosing inaccurate solutions in situations. They put forth maximum efforts in the pursuit of their standards, but are able to accept personal limitations and environmental obstacles if they do not accomplish the ideal performance (Dunn, Causgrove Dunn, & Syrotuik, 2002). Maladaptive perfectionists, however, is driven by an overwhelming fear of failure. Even though both adaptive and maladaptive perfectionists set high standards of performance, maladaptive perfectionists tend to be overly critical about themselves (Frost et al., 1990), and are infrequently satisfied with their performance, because of their lack of freedom to make mistakes (Dunn et al., 2002). Previous research on talented athletes has found a significantly higher prevalence of adaptive perfectionism than maladaptive perfectionism (Dunn et al., 2006). Since adaptive perfectionism is self-referential, athletes set high personal standards not dependent on external factors such as pressure from coaches and parents.

In achievement contexts, athletes are assumed to be motivated through their state of goal involvement, described as ego or task involvement (Ommundsen, Roberts, Lemyre, & Miller, 2005). It is assumed that people are predisposed to be egotistical or task involved, and these predispositions are called goal orientations, which differ between ego and task orientations. Ego orientation is associated with maladaptive behavior and is characterized by athletes defining success as having higher ability than others (Nicholls, Cobb, Wood, Yackel, & Patashnick, 1990). How well the athlete has performed is rated lower than winning, receiving recognition and being better than others. Difficulty and one's ability is assessed as high or low compared to members of a normative reference group (Ommundsen, Roberts, & Kavussanu, 1998). On the other hand, task orientation is associated with adaptive behavior. This orientation is characterized by athletes who assess their ability and task difficulty from their own sense of mastery, understanding and knowledge. Task orientation involves a self-referential definition of success as the result of improving ability or the achievement of something that is personally challenging (Nicholls et al., 1990). It is important to acknowledge that achievement goal orientations are orthogonal (Roberts, 2012). Athletes can be higher or lower in both or either orientation at the same time. Therefore, it is important to consider the simultaneous combination of task and ego orientation, rather than focusing on whether an athlete is task or ego orientated. Pensgaard and Roberts (2000) found that elite-athletes scored high for both orientations. However, if an athlete scores high on ego-orientation and low on task orientation, s/he is more exposed to burn out and diminished motivation if they fail. Therefore, high task orientation is important, as it can act as a safety net when results are poor. For young talents, with unstable performances, high task orientation can be vital for their development.

Even though athletes are predisposed to act in a task or ego-involved way in an achievement context, the motivational dynamics of the context and their respective group will also have an influence on the adopted goal of action. Motivational climate refers to how the goal structures of what is emphasized are perceived by participants in a particular setting (Ommundsen et al., 2005). As with goal orientations, motivational climate is also divided into two elements; performance and mastery climate. If the environment promotes interpersonal competition, achieving results and public recognition of skill demonstrations, the climate is more likely a performance climate (Ames, 1992). The best players get the most attention and constructive feedback, and the criteria for success is winning and being better than others (Roberts, 2012). The athletes do not have much self-determination, and this climate is associated with ego-involvement and maladaptive behavior. Mastery climate, on the other hand, is characterized by coping and learning. The athlete is allowed to fail, in the knowledge that this may promote self-determination and choices (Ommundsen et al., 2005). In this environment progress and efforts are important criteria to master, and coaches will be concerned to promote equal recognition, time and attention for all players. This climate is not concerned with interpersonal competition, but focuses more on self-referential criteria for success and task involvement (Ames, 1992). The climate is also assumed to vary between training and competitions, where there is a greater performance-oriented focus during competitions than in training.

Talent development is a long-term process, where the outcomes are highly unpredictable. This has led researchers and practitioners to focus on parts of the development process in order to be able to refine the variables affecting this process. Motivational factors are considered to affect this development

process to a large extent. Grounded in the theoretical framework of achievement goal theory and perfectionism theory, the purpose of this study was to examine how self-assessed perceived competence covariance these variables among Norwegian football academy players.

Methods

Participants

140 male football players, aged between 12-19 years (M age = 14.07, SD = 1.85), participated in this study. The young players were recruited from three different football academies. Two of the academies work as a team within a club, while the third academy is a non-club related academy, where the players play for different teams. Consent for the study was obtained from the leaders and coaches of the academies, after we described the purpose of the study.

Measures

Perfectionism

The Multidimensional Perfectionism Football Scale (MPS-Football) (Dunn et al., 2002) was used to assess the degree of the athletes perfectionism. The scale is a 34-item measure that includes a 7-item personal standard-scale (e.g. "I hate being less than the best at things in football") (Cronbach's alpha=.561), an 8-item concern over mistakes scale (e.g. "When I fail even slightly in competition, for me, it is as bad as being a complete failure") (Cronbach's alpha=.701), a 9-item perceived parental pressure scale (e.g. "My parents set very high standards for me in football") (Cronbach's alpha=.747), a 6-item perceived coach pressure scale (e.g. "I feel like I can never quite live up to my coach's standards") (Cronbach's alpha=.620), and 4-item doubts about actions scale (e.g. "I tend to get behind in my work because I repeat things over and over") (Cronbach's alpha=.560). In the analysis, the doubts about actions items are excluded because of the subscales' validity, and other study concerns over the subscale (Dunn et al., 2002). Respondents were asked to consider their feelings about themselves and others on a 5-point scale, from 1=Incorrect to 5=correct.

Goal orientations

A Norwegian version of the Perception of Success Questionnaire (POSQ) (Roberts, Treasure, & Balague, 1998) was used to assess the degree of the athletes' goal orientations. POSQ consists of 12 statements, which includes two 6-item subscales measuring task (e.g. "I show personal progress") (Cronbach's alpha=.726) and ego orientations (e.g. "I do it better than my opponents") (Cronbach's alpha=.784). The stem for each item was "When I play football, I feel most successful when...". Respondents were asked to answer on a 5-point scale from 1=Strongly disagree to 5=Strongly agree.

Motivational climate

To measure the perceived motivational climate, a Norwegian version of the Perceived Motivational Climate in Sport Questionnaire (PMCSQ) (Roberts & Ommundsen, 1996). The respondents were asked to consider 19 items with the stem "during soccer training at the academy, I find that...", and includes two subscales. The mastery climate subscales consist of 9 statements (e.g. "Efforts are rewarded") (Cronbach's alpha=.759), and 10 statements regarding performance climate (e.g. "The coaches favour certain players") (Cronbach's alpha=.782). Responses were indicated on 5-point Likert scales, from 1=Strongly disagree, to 5=Strongly agree.

Perceived competence

Unlike the measurements of perfectionism, goal orientations, and motivational climate, the measurement of perceived competence is not collected from a standardised measuring instrument. The basis of the instrument is the four indicators for talent in soccer (physical, physiological, sociological and psychological), formed by Williams and Reilly (2000). Sæther (2014) modified this to technical, tactical, mental, social and physical abilities. The respondents was asked to compare themselves to the other players on the academy, and consider if they are 1=Poorer than most, 3=Equivalent, or 5=Better than most. The scores on the five variables were added together, and the average used as a measure for their perceived competence (Cronbach’s alpha=.596).

Procedure

Assessment was conducted before or after a regular training session with two of the academies. With the last academy, players were gathered by the coaches to answer the questionnaire.

Before the administration of the questionnaire, the participants were told that the general purpose of the study was to investigate what characterises talented young soccer players. It was also emphasised that there were no right or wrong answers, and that responses were voluntary and anonymous.

Data analysis

In this analysis data were screened for missing data, potential outliers, and assumptions of normality. For all of the questionnaire scales, mean scores were computed. In the results section descriptive statistics and Pearson product-moment correlation coefficients are presented. The scale reliability is presented under materials and method.

Results

In Table 1 descriptive statistics for the variables are presented. As the table shows, the respondents perceived their competence was equivalent or better than other teammates.

Table 1. Descriptive statistics of perceived competence, perfectionism, goal orientations and perceived motivational climate

Variable	N	Min	Max	Mean	Std
Perceived competence	107	2.40	5.00	3.75	0.600
Personal standards	107	1.29	5.00	3.50	0.733
Concern over mistakes	107	1.25	4.50	2.64	0.666
Perceived parental pressure	107	1.00	4.22	2.00	0.634
Perceived coach pressure	107	1.17	5.00	2.59	0.690
Ego orientation	107	1.67	5.00	3.83	0.751
Task orientation	107	1.50	5.00	4.37	0.572
Performance climate	107	1.10	4.70	2.96	0.666
Mastery climate	107	2.89	5.00	4.20	0.534

When it comes to perfectionism, personal standards scores were higher than for the rest of the dimensions of perfectionism, while perceived parental pressure was lowest. It is also

worth noting that mean task orientation and perceived mastery climate was higher than ego orientation and perceived performance climate.

Table 2. Pearson correlations of perceived competence, age, perfectionism, goal orientations and perceived motivational climate

Variables	PC	Age	PS	COM	PPP	PCP	Ego	Task	PC	MC
PC	1									
Age	-.202*	1								
PS	.246*	.143	1							
COM	.061	.040	.326**	1						
PPP	.090	-.126	.267**	.310**	1					
PCP	.042	.114	.330**	.503*	.549**	1				
Ego	.161	.202*	.483**	.218*	.050	.109	1			
Task	.047	.052	.183	.036	.121	.186	.293**	1		
PC	.109	.169	.224*	.402**	.380**	.547**	.103	-.119	1	
MC	.146	-.037	.254**	.034	.060	.031	.008	.275**	-.164	1

Legend: PC=Perceived competence; PS=Personal Standards; COM=Concern over mistakes; PPP=Perceived parental pressure; PCP=Perceived coach pressure; Ego=Ego orientation; Task=Task orientation; MC=Mastery climate; PC=Performance climate.

In Table 2 correlation coefficients are reported. The correlation coefficients show that all of the dimensions of perfectionism correlated positively with each other and with perceived performance climate. A positive correlation is also found between concern over mistakes and ego orientation (.218, <0.05). Task orientation was found to correlate positively with ego orientation (.293, <0.01) and perceived mastery climate (.275, <0.01).

Discussion

Previous research has shown a relationship between personal standards, task orientation and perceived mastery climate

(Appleton, Hall, & Hill, 2009; Dunn et al., 2002; Hall, Kerr, & Matthews, 1998; Ommundsen et al., 2005), as well as between the remaining perfectionism dimensions, ego-orientation and perceived performance climate. Some researchers have made a distinction between adaptive (PS, Task and MC) and maladaptive motivational profile (COM, PPP, PCP, Ego and PC) (Ommundsen et al., 2005). The present study shows that talented soccer players score higher on the dimensions that are assumed to be adaptive, rather than on the dimensions that are assumed to be maladaptive. These results show that the participants’ success criteria are more self-referential, which means that they are not necessarily dependent on a normative reference group or acknowledgment to feel successful (Dunn et al., 2002;

Nicholls et al., 1990; Ommundsen et al., 1998). People who scored high on the adaptive motivational profile are also capable of accepting limitations and environmental obstacles when they don't accomplish the ideal performance (Dunn et al., 2002). For young football talents it would be advantageous to score high on the adaptive dimensions, as they may be unstable in their performances. In order to develop, it can be important to be a part of a climate where they are allowed to experience failure and learn from these experiences. It is also worth noting that personal standards are the only dimension in the motivational profiles that correlate significantly with perceived competence. This indicates that there is a positive relationship between setting high personal standards and high perceived competence. The relationship can be explained by the realistic standards adaptive perfectionists set to themselves (Dunn et al., 2002), and the pleasure of achieving these standards which can lead to a higher competence feeling. The individuals in football academies should set these personal standards according to their own development goals.

Earlier studies have found a negative or non-significant correlation between the remaining perfectionism dimensions and perceived competence (Hall, Kerr, Kozub, & Finnie, 2006; Hall et al., 1998) while this study found a non-significant correlation. At the same time, personal standards positively correlate with all the other perfectionism dimensions. Parker (1997) argued that personal standards may be maladaptive, if they lead to an increase in the maladaptive dimensions of perfectionism. When personal standards lead to more doubts about action, and more perceived pressure from parents and coaches, they may be associated with a more negative pursuit for achievements. Players can therefore set their personal standards based on external factors such as their parents' and coaches' expectations. High personal pressure, especially from coaches, is one of the main challenges that may affect football academy players' development (Richardson et al., 2004). Personal standards also correlate positively with perceived performance and mastery climate, which can indicate that standards are not just based on mastery criteria, but also dependent on and regulated by recognition from others (Ames, 1992; Roberts, 2012). In such large groups as the football academies, it may be reasonable to compare oneself to other players, and set their standards based on comparison with other players in the academy. The academies quality can, in other words, affect the individuals' personal standards.

Even though the participants' scores were higher on the dimensions that address development as an important characteristic, many of these dimensions correlate significantly positively with the assumed maladaptive dimensions. In football, and sport generally, a strong competitive element exists that is difficult to change (Ommundsen & Roberts, 1999). Some studies have suggested that introducing mastery-oriented criteria, and at the same time maintaining performance-oriented criteria, will lead to an equally positive and effective motivational strategy as a focus entirely on mastery criteria (Ommundsen & Roberts, 1999). It is important to stress that many of the participants in this study are not just at development stage, but that they also compete in adult competitive football, where the performance and competitive element is stronger (Ommundsen & Roberts, 1999). It may be reasonable to assume that mastery-oriented elements are stronger in training, while the competitive elements are stronger in competition. Even though the athletes may be motivated to continue training for a potential professional career by being a part of a football academy environment (Ashworth & Heyndels, 2007), one should consider the motivational climate in the group. The young athletes develop at a different pace, and if the coaches focus solely on results and interpersonal comparison, instead of on the individuals' development, many of the athletes may lose motivation and the pleasure of playing football.

It would be advantageous to consider the overall relationship between the two motivational profiles. As we know, goal orientations are orthogonal (Roberts & Kristiansen, 2012). The present results support that, where the goal orientations are positively correlated. Since the players are part of academies where they may be replaced and the competition is hard, the maladaptive dimensions can be hard to change. At the same time it is important that the adaptive dimensions are underlying and stronger, because of the mastery and self-referential criteria they entail (Ames, 1992; Frost et al., 1990; Nicholls, 1984). It will be important not only for the players to be aware of this, but also the coaches, parents and significant others, because of their influence. As supported by earlier research, a high quality coach-athlete relationship may reduce stress, increase performance and enjoyment of the competitive experience (Kristiansen & Roberts, 2010; Rodahl et al., 2015). Supporting parents can also influence these factors.

REFERENCES

- Ames, C. (1992). Classrooms: Goals, Structures, and Student Motivation. *Journal of Educational Psychology*, 84(3), 261-271.
- Appleton, P. R., Hall, H. K., & Hill, A. P. (2009). Relations between multidimensional perfectionism and burnout in junior-elite male athletes. *Psychology of Sport and Exercise*, 10, 457-465.
- Ashworth, J., & Heyndels, B. (2007). Selection Bias and Peer Effects in Team Sports: The Effect of Age Grouping on Earnings of German Soccer Players. *Journal of Sports Economics*, 8, 355-377.
- Dunn, J. G. H., Causgrove Dunn, J., Gotwals, J. K., Vallence, J. K. H., Craft, J. M., & Syrotuik, D. G. (2006). Establishing construct validity evidence for the Sport Multidimensional Perfectionism Scale. *Psychology of Sport and Exercise*, 7, 57-79.
- Dunn, J. G. H., Causgrove Dunn, J., & Syrotuik, D. G. (2002). Relationship Between Multidimensional Perfectionism and Goal Orientations in Sport. *Journal of Sport & Exercise Psychology*, 24(4), 376-395.
- Ericsson, K. A., Krampe, R., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100, 363-406.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The Dimensions of Perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468.
- Hall, H. K., Kerr, A. K., Kozub, S. A., & Finnie, S. B. (2006). Motivational antecedents of obligatory exercise: The influence of achievement goals and multidimensional perfectionism. *Psychology of Sport and Exercise*, 8, 297-316.
- Hall, H. K., Kerr, A. K., & Matthews, J. (1998). Precompetitive Anxiety in Sport: The Contribution of Achievement Goals and Perfectionism. *Journal of Sport & Exercise Psychology*, 20, 194-217.
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Be-*

- havior*, 15(1), 27-33.
- Kannekens, R., Elferink-Gemser, M. T., Post, W. J., & Visscher, C. (2009). Self-Assessed tactical skills in elite youth soccer players: A longitudinal study. *Perceptual and Motor Skills*, 109, 459-472.
- Kristiansen, E., & Roberts, G. C. (2010). Young elite athletes and social support: Coping with competitive and organizational stress in "Olympic" competition. *Scandinavian Journal of Medicine & Science in Sports*, 20, 686-695.
- Nicholls, A. R. (2011). *Mental toughness and coping in sport*. In D. F. Gucciardi & S. Gordon (Eds.), *Mental Toughness in Sport* (30-46). New York: Routledge.
- Nicholls, J. G. (1984). Achievement Motivation: Conceptions of Ability, Subjective Experience, Task Choice, and Performance. *Psychological Review*, 91(3), 328-346.
- Nicholls, J. G., Cobb, P., Wood, T., Yackel, E., & Patashnick, M. (1990). Assessing Students' Theories of Success in Mathematics: Individual and Classroom Differences *Journal for Research in Mathematics Education*, 21(2), 109-122.
- Ommundsen, Y., & Roberts, G. C. (1999). Effect of motivational climate profiles in motivational indices in team sport. *Scandinavian Journal of Medicine & Science in Sports*, 9, 389-397.
- Ommundsen, Y., Roberts, G. C., & Kavussanu, M. (1998). Perceived motivational climate and cognitive and affective correlates among Norwegian athletes. *Journal of Sports Sciences*, 16, 153-164.
- Ommundsen, Y., Roberts, G. C., Lemyre, P.-N., & Miller, B. W. (2005). Peer relationships in adolescent competitive soccer: Associations to perceived motivational climate, achievement goals and perfectionism. *Journal of Sports Sciences*, 23(9), 977-989.
- Parker, W. D. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Association*, 34, 545-562.
- Pensgaard, A. M., & Roberts, G. C. (2000). The relationship between motivational climate, perceived ability and sources of distress among elite athletes. *Journal of Sport Sciences*, 18, 191-200.
- Richardson, D., Gilbourne, S., & Littlewood, M. (2004). Developing support mechanisms for elite young players in a professional football academy: Creative reflections in action research. *European Sport Management Quarterly*, 4, 195-214.
- Roberts, G. C. (2012). Motivation in Sport and Exercise From an Achievement Goal Theory Perspective: After 30 Years, Where Are We? In G. C. Roberts & D. C. Treasure (Eds.), *Advances in Motivation in Sport and Exercise* (3), 5-58. Champaign, IL: Human Kinetics.
- Roberts, G. C., & Kristiansen, E. (2012). Goal Setting to Enhance Motivation in Sport. In G. C. Roberts & D. C. Treasure (Eds.), *Advances in Motivation in Sport and Exercise* (3), 207-228. Champaign, IL: Human Kinetics.
- Roberts, G. C., & Ommundsen, Y. (1996). Effect of goal orientation on achievement beliefs, cognition and strategies in team sport. *Scandinavian Journal of Medicine & Science in Sports*, 6(1), 46-56.
- Roberts, G. C., Treasure, D. C., & Balague, G. (1998). Achievement goals in sport: The development and validation of the Perception of Success Questionnaire. *Journal of Sports Sciences*, 16(4), 337-347.
- Rodahl, S., Giske, R., Peters, D. M., & Høigaard, R. (2015). Satisfaction with the coach and mental toughness in elite male ice hockey players. *Journal of Sport Behavior*, 38, 419-431.
- Sæther, S. A. (2014). Talent identification in Soccer. What do Coaches Look for? *Idrottsforum.org*.
- Toering, T. T., Elferink-Gemser, M. T., Jordet, G., & Visscher, C. (2009). Self-regulated and performance level of elite and non-elite youth soccer players. *Journal of Sports Sciences*, 27(14), 1509-1517.
- Williams, A. M., & Reilly, T. (2000). Talent identification and development in soccer. *Journal of Sports Sciences*, 18(9), 657-667.

S. A. Sæther

Norwegian University of Science and Technology, NTNU, Department of Sociology and Political Science, Trondheim, Norway
e-mail: stigarve@svt.ntnu.no

