


Elite portuguese soccer players' use of psychological techniques: where, when and why

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ABSTRACT

Freitas, S.P., Dias, C.S. & Fonseca, A.M. (2013). Elite Portuguese Soccer Players' Use of Psychological Techniques: Where, when and why. *J. Hum. Sport Exerc.*, 8(3), pp.847-860. The purpose of the current study was to examine the use whether, were, when and why soccer players used self-talk, imagery, goal setting and relaxation. Semi-structure, in-depth, qualitative interviews were conducted with 16 elite soccer players from Portuguese premier league soccer teams that played regularly in UEFA champions and Europe leagues. Results demonstrated that participants employed self-talk, goal-setting, and imagery with several purposes in their soccer routines. On the other hand, participants highlighted a lack of use of relaxation. In addition, results showed that the use of psychological techniques was lower in training than competition setting. Implications of the results are discussed and future research and practical recommendations are suggested. **Key words:** SOCCER PLAYERS, SELF-TALK, GOAL-SETTING, IMAGERY, RELAXATION

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INTRODUCTION

Psychological skills training (PST) entails a “systematic and consistent practice of mental or psychological skills for the purpose of enhancing performance, increasing enjoyment, or achieving greater sport and physical activity self-satisfaction” (Weinberg & Gould, 2011, p.248). In PST it seems useful to differentiate between skills, or target behaviors (e.g. self-confidence, attention focus, motivation), and methods (e.g. self-talk, imagery, goal-setting, relaxation), which are the vehicles used to attain the target behaviors (Vealey, 1988, 2007).

We focus on the present study on the psychological techniques of imagery, self-talk, goal setting and relaxation. Although we acknowledge the alternative psychological techniques used in sport performance, we selected the four skills mentioned previously, because of their frequent employment in the psychological skill literature. According to several authors (Gould, Murphy, Tammen, & May, 1991; Sullivan & Nashman, 1998; Vealey, 1988, 2007), these specific techniques have been the focus of most of the PST research. They have received widespread attention in both single-skill (e.g. Evans, Jones, & Mullen, 2004; Johnson, Hrycaiko, Johnson, & Halas, 2004) and multiple-skill (e.g. Hanton & Jones, 1999; Thelwell, Greenlees, & Weston, 2006, 2010) applied studies.

In this context, it also should be noted that the use of qualitative methods as an alternative to the traditional quantitative methods was highlighted as an important direction for PST evaluation (Vealey, 1988). For the author, “information such as this can facilitate the development of salient and appropriate PST approaches that truly meet the needs of athletes” (p.332). Therefore it was not surprising that PST literature has seen an increase in the number of descriptive and qualitative studies examining the use of each aforementioned psychological technique from an athlete perspective.

One of the most insightful imagery studies was conducted by Munroe, Giacobbi, Hall, and Weinberg (2000), who examined the four W's of imagery used by athletes. Results from this study reports that although athletes used imagery before, during and after both training and competition, they used it more prior to competition than at any other time. In addition athletes also report using imagery outside of these two environments, including at work, school and home (Hall, Rodgers, & Barr, 1990; Rodgers, Hall, & Buckolz, 1991; Salmon, Hall, & Haslam, 1994), and during sport-injury rehabilitation (Sordoni, Hall, & Forwell, 2000). With regard to the “Why” of imagery use, Paivio (1985) proposed that imagery can be used for both cognitive and motivational purposes. Similarly, Munroe et al. (2000) found that imagery can be used for both cognitive (specific, general) and motivational (specific, general arousal, general mastery). Also in this context, Salmon et al. (1994), reported athletes using imagery more for its motivation function than its cognitive function.

Like imagery, self-talk used by athletes has also received considerable research attention. Based on recent sport specific self-talk findings (e.g. Hardy, Gammage, & Hall, 2001; Theodorakis, Weinberg, Natsis, Douma, & Kazakas, 2000), self-talk can be better thought of as a multidimensional phenomenon concerned with athletes' verbalizations that are addressed to themselves, which can serve both instructional and motivational functions. In a descriptive study of self-talk use in sport, Hardy et al. (2001) (following the approach used by Munroe et al., 2000) examined the “4 W's” of self-talk used by athletes. Athletes of this study reported the use of self-talk before, during and after training and competition. Similar to the findings reported by Munroe et al. (2000), Hardy and colleagues (2001) found that self-talk serves two main functions for the athlete: cognitive (specific, general) and motivational (mastery, arousal, drive).

The third psychological skill briefly reviewed here is goal setting. Although athletes set goals in both training and competition, they set more competition goals than practice goals (Burton, Weinberg, Yukelson, & Weigand, 1998; Weinberg, Burton, Yukelson, & Weigand, 2000). According to Munroe, Hall, and Weinberg (2004) athletes reported slightly more goals for training than competition. Gould (2001) reported that goal setting to be beneficial for changing important psychological states such as anxiety, motivation, and confidence. Munroe et al. (2004) found that athletes set goals for several purposes that include: skills improvement and execution, strategies of game improvement and execution, controlling arousal, being mentally tough, being focused, staying positive, and increasing self-confidence.

The final psychological technique briefly reviewed here is relaxation. This specific technique has received most of its attention via intervention-based studies alone (Thelwell, Weston, Greenlees, & Hutchings, 2008). Relaxation techniques have been used in sport primarily to enhance recovery from training and competition, manage anxiety, and improve performance (Weinberg & Comar, 1994). Additionally, this technique has been suggested to increase concentration, enhance motor skills, and improve ability to handle arousal and stress (Layman, 1978). However it should be noted that much of the work has focussed on the reduction of a competitive anxiety and the mechanisms to increase the directional perceptions of the anxiety response (Maynard, Hemmings, & Evans, 1995). Several techniques are available and can be categorized as physical or somatic relaxation strategies and cognitive relaxation strategies (Hardy, Jones, & Gould, 1996). It has been suggested that different relaxation techniques may induce different relaxation responses. For example Lehrer's review (1997) concluded that methods with predominantly cognitive components tend to produce specific cognitive effects (e.g. decreases in amount of worrying, self-assessment of anxiety or pain, inability to concentrate mentally, etc.) and methods with predominant somatic components tend to produce greater muscular effects as measured by surface EMG (Lehrer & Woolfolk, 1993).

The athletes' use of the four key psychological techniques is widely reported in the PST literature, however it should be noted that few or no studies focus on sport-specific samples. According to several authors psychological techniques use could be dependent upon the type of sport (Hardy, Hall, & Hardy, 2005; Munroe, Hall, Simms, & Weinberg, 1998). For example, Individual sport athletes reported greater use of self-talk, as well as the functions of self-talk, than their team sport counterparts, i.e. team sport athletes (Hardy et al., 2005, study 1). To achieve a better understanding of psychological techniques it is important to execute research in a diverse group of sports (Rogerson & Hrycaiko, 2002). Therefore, there seems a need to examine specific-sport samples in order to facilitate the development of more specific psychological interventions. For that reason, the present study has focused on Portuguese elite soccer players. This specific-sample was chosen due to their high popularity in Europe, but also because of the complete lack of qualitative studies that examined the issues of where, when and why these practitioners used psychological techniques. Understanding the soccer players' perspectives on the aforementioned issues will certainly provide useful information for the practitioners (i.e., sport psychologists and coaches) developing more specific and effective PST interventions.

Therefore the purpose of the present study was to conduct an exploratory investigation to identify and describe where, when and why (for what purposes) elite Portuguese soccer players use the skills of imagery, self-talk, goal setting and relaxation. Even before these questions are asked, we must consider whether or not they are even using each of these psychological techniques. Due to the in-depth nature of the questions being asked, as well as, the recommendations of experts in this field (Vealey, 1988) a qualitative approach was deemed appropriate.

METHODS

Participants

The sample was comprised of 16 male Portuguese elite soccer players ranged in age from 23 to 34 years old. At the time of the interview all of the participants played in Portuguese first league teams that competed in the UEFA Europe league or UEFA champions league. Some of them (n=6) were also playing for the Portuguese national soccer team, which were among the strongest in the world (ranked in top 10 on the official FIFA list). The sample represented all of the soccer field positions and included two goalkeepers, four defenders, five midfielders and five attackers. All participants volunteered their consent to participate in the study.

Interview guide

The data were collected from a semi-structured interview with open-ended questions developed in accordance with the purposes of the current study. The interview guide used in the present study was composed by six sections. The first section contained demographic information and other introductory comments (about the purpose of the research and information about the structure of the interview). The second until the fifth section followed similar procedures but were focused on self-talk, imagery, goal-setting and relaxation respectively. In each of these sections participants received a definition of the psychological technique in consideration. After this, participants were asked to indicate if they use the psychological technique in soccer. If they responded positively, they are asked about the questions relating to when and why they use it in both training and competition setting (e.g. "Where, in a training situation, do you use self-talk?"; "What are some of the reasons you use imagery in training?"). The questions relating to the functions (i.e. why) followed Paivio's (1985) framework, which includes both cognitive and motivational functions. The questions emanating from the framework provided some direction for the participants (e.g. "Could you describe your use of goal setting for working on a specific skill?"; "Could you describe your use of self-talk to execute strategies of play?"). The final section provided the participants with the opportunity to ask questions about the interview experience and to discuss any issues that may have been omitted. Three pilot interviews were conducted with three non-professional soccer players, and minor amendments to the questions were made to the appropriateness of the probe and elaboration questions.

Procedures

The interviews were conducted by the first author of the present investigation that had previous experience as assistant coach in Portuguese premier league soccer teams and was therefore familiar with the history, experiences, and terminology used by participants. According to Lincoln and Guba (1985) this was one method of ensuring the trustworthiness of the data collection. The interviews were taped recorded and ranged in duration from 45 to 75 minutes and was conducted face to face in an environment comfortable for the participants. Ten of the 16 interviews took place in the clubs' facilities before or after a training session. Of the remaining interviews, four were conducted at the athlete's home, and two in hotel rooms.

Data analysis

The data were analysed using hierarchical content data analysis procedures recommended by Patton (2002). The first author read and reread each of the interview transcripts to become completely familiar with the content of each interview. Next, raw data themes were identified from quotes characterizing each participant's responses within each area of the interview. Data were then appropriately coded, compared and organized into categories using both inductive and deductive content analysis. Deductive analysis ensured that answers discussing specific content were related to the question being asked. Then, using a hierarchical induction, first, second and third-order subtheme emerged through clustering raw data around

underlying uniformities. The process continued until general dimensions emerged (that represents level with higher abstraction). Finally, in order to control individual bias and ensure verifiability of the findings, all the data were presented and discussed with another author to act as “devil advocate” (Marshall & Rossman, 1995). Any comments, concerns, or queries raised by this author regarding the analysis were then acknowledged, clarified, or changed as appropriate by the first author. To provide an ultimate validity check, the first author reread all the transcripts and verified that all themes and dimensions were represented respectively and in accordance with the question being asked. The first author chose segments of text (i.e. verbatim quotes from participants) to represent the power of qualitative data to illustrate the themes (Patton, 2002).

RESULTS

The inductive-deductive analysis exposed four general dimensions (self-talk, goal-setting, imagery and relaxation) emerging from 120 raw data themes mentioned by the elite soccer players. The dimensions were abstracted from eight third order subthemes, these from 18 second order-subthemes and these form 44 first order-subthemes represented in figures 1-4.

Self-talk

Self-talk dimension shows the participants' perspectives about their used of self-talk (Figure 1). The interviews revealed that all of the 16 players of the present study reported using self-talk in their soccer career. Furthermore 10 of the participants mentioned a systematic use of this technique in both training and competition. On the other hand, six of the participants revealed that only employing self-talk in competition. With respect to the time frame, the majority of the sample stated using this technique more during the competition than any other time frame. Four participants highlighted the use of self-talk during half-time, whereas 15 participants employed it more frequently during the game. The following quotation is quite representative of this last perspective:

“I usually use self-talk during the game... I also use it in other moments, but during the competition is undoubtedly when I use it more often. During the 90 minutes of the game I'm constantly giving suggestions and directions to myself, like I was coaching myself”.

When participants were asked about the purposes for using self-talk three second order-subthemes emerged: technical-tactical function (cognitive), psychological function (motivational) and “extra” function.

Regarding the cognitive function of self-talk, participants mentioned using self-talk for two main reasons: technical-tactical improvement and technical-tactical execution. The first related to correct technical skills and learning new tactical skills. The second and most frequently mentioned cognitive function, related to the proper execution of technical and tactical skills in order to perform as well as possible. This is well illustrated in the following soccer player's quote: “I use self-talk to execute defensive movements. Is a strategy that I use to perform my defensive tasks as accurately as possible.”

Additionally, the participants reported employing self-talk to enhance (or optimize) several psychological skills, such as concentration, motivation and self-confidence. An example of the former includes: “Usually I use it (self-talk) to keep me focused and to not deviate from what I have to do”. The participants also used self-talk to help them psych up for games, to overcome difficulties and to control stress and anxiety levels. This latter reason is outlined in the following quotation: “When things aren't going well during the game I talk to myself in order to keep calm and to reduce my anxiety levels”.

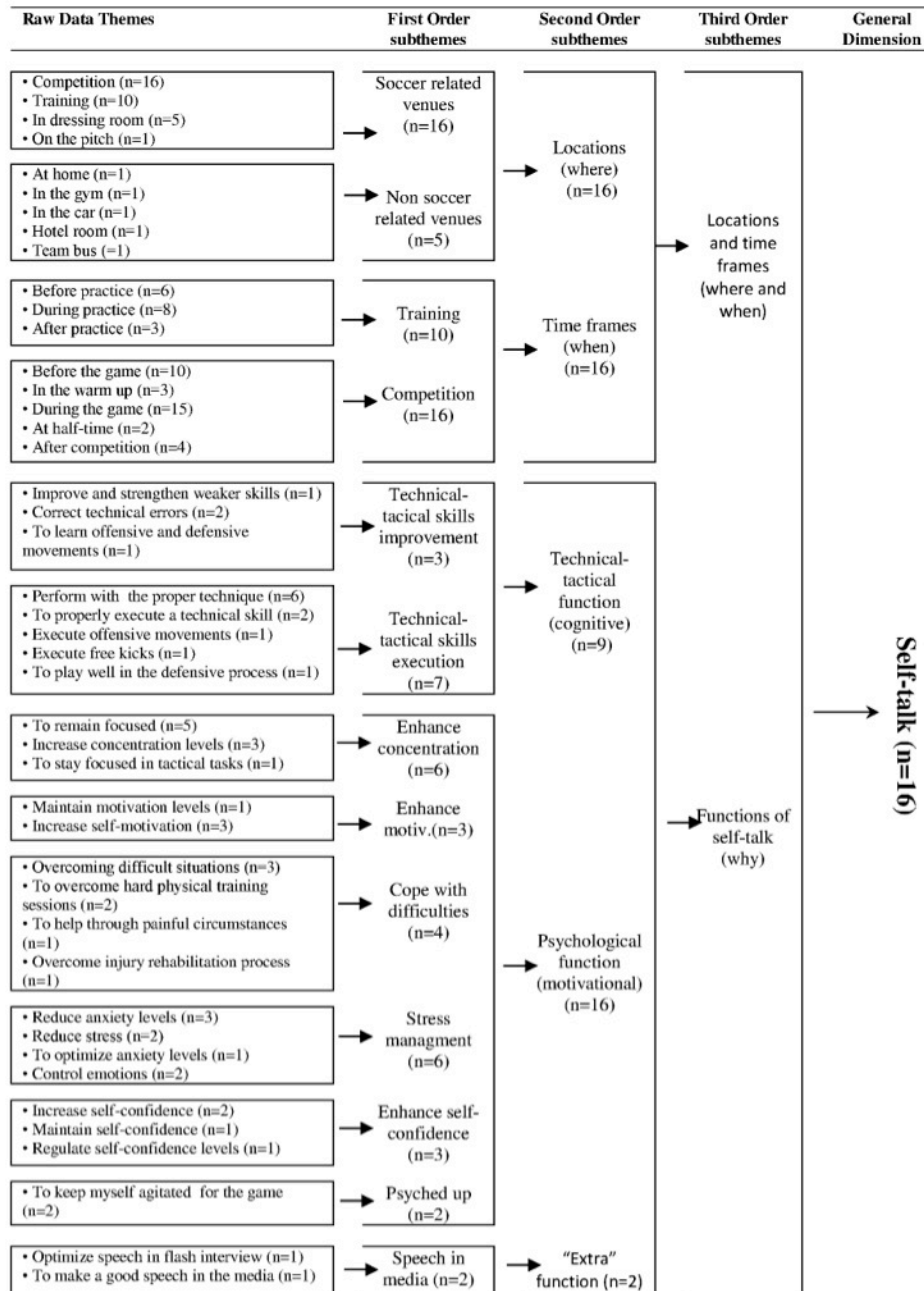


Figure 1. Hierarchical structure of the self-talk general dimension

Note: the number following each raw data theme first and second order subthemes indicates the number of participants who reported them

Finally, two soccer players raised an interesting purpose regarding the use of self-talk. One of these players mentioned using this technique after the game in order to elaborate their speech on flash-interview, as illustrated in the following quote: "At the end of the game, before I go to the flash interview I used the self-talk to prepare my speech at the flash interview".

Goal Setting

When the soccer players were asked to discuss the goals that they set goals for themselves, 13 participants pointed out its use (Figure 2). Nevertheless, only five of these participants expressed setting goals in both training and competition locations. Data also showed that the majority of the participants setting goals before the game.

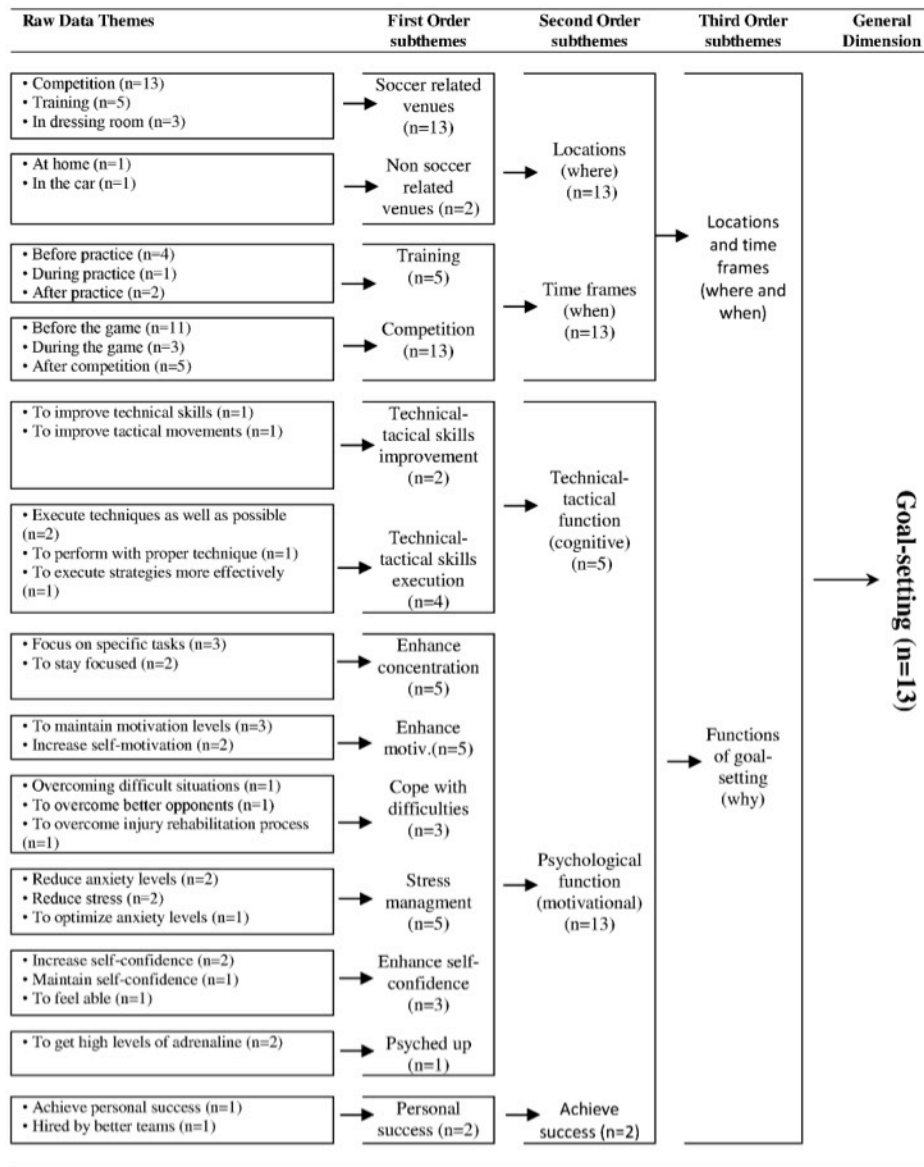


Figure2. Hierarchical structure of the goal-setting general dimension

Participants highlighted several purposes for employing goal setting. Particularly, they used this technique to improve and execute technical and tactical skills. It should be noted, that as in the case of self-talk the participants expressed using it slightly more for the execution than for improvement. In addition, the soccer players reported using goal-setting to regulate their psychological state. For example, they mentioned setting goals to enhance motivation, concentration and self-confidence, to reduce stress and anxiety and to

cope with difficulties. The purpose of using goal setting for adverse situations in competition is summarizing in the following quotation:

“I set goals to overcome obstacles and difficulties in the competition. For example, when I have a minor injury during a game I remember my personal goals and it gives me strength to overcome the pain and keep playing with a high performance, because at this level we always need perform our best”.

In addition to the technical-tactical and psychological goal-setting functions, two soccer players highlighted the use of this specific technique in order to help them achieve personal success.

Imagery

Thirty raw data themes were included in this dimension, which is related to the players' perspectives regarding their use of imagery (Figure 3). Results showed that eleven of the participants expressed employing imagery in their soccer routines. However, it was evident that only six of these participants reported a systematic use of this psychological technique in both training and competition.

As with the previous psychological technique (goal-setting), the majority of the sample employed imagery more before the competition than any other time frame. In this context, a participant expressed their used during the warm up for the game, as is well illustrated in the following goalkeeper's quotation: “During the warm up period I usually visualize a set of specific game situations...so before the game I use the imagery to prepare myself for a set of possible situations that I can come across during the game”.

Participants of the current study pointed out several reasons for employing imagery. Although imagery was employed by some participants for the improvement and execution of technical and tactical skills, they used it more with the latter than for the former purpose. For example, a soccer player reported using imagery to help execute direct and indirect free kicks:

“When I go to score a penalty or a free kick in a game I visualize how I will score it. I imagine how I will put the foot on the ball, as I tilt the foot, where I will put the ball, i.e. I visualize a set of technical content in order to be succeeded”.

Imagery was also used by the participants to maintain and increase focus, motivation and self-confidence. With respect to this last purpose, one soccer player said: “I use the imagery in competition to increase my self-confidence, for example I imagine myself making a set of good dribbles and greatest goals and this give me confidence for the game”.

Additionally, some coaches employed this specific technique to overcome difficult situations and to optimize stress and anxiety levels. The next sentence expresses this last perspective:

“Normally I use internal images to control my stress and anxiety levels before the games. I usually imagine things that make me feel good, that give me comfort and this helps me to deal with the stress and anxiety”.

Finally, one of the players mentioned using imagery to perform well in the flash interview: “In the minutes prior to the flash interview I imagine my performance in front of the cameras. Is a strategy that I used to look good during the interview”.

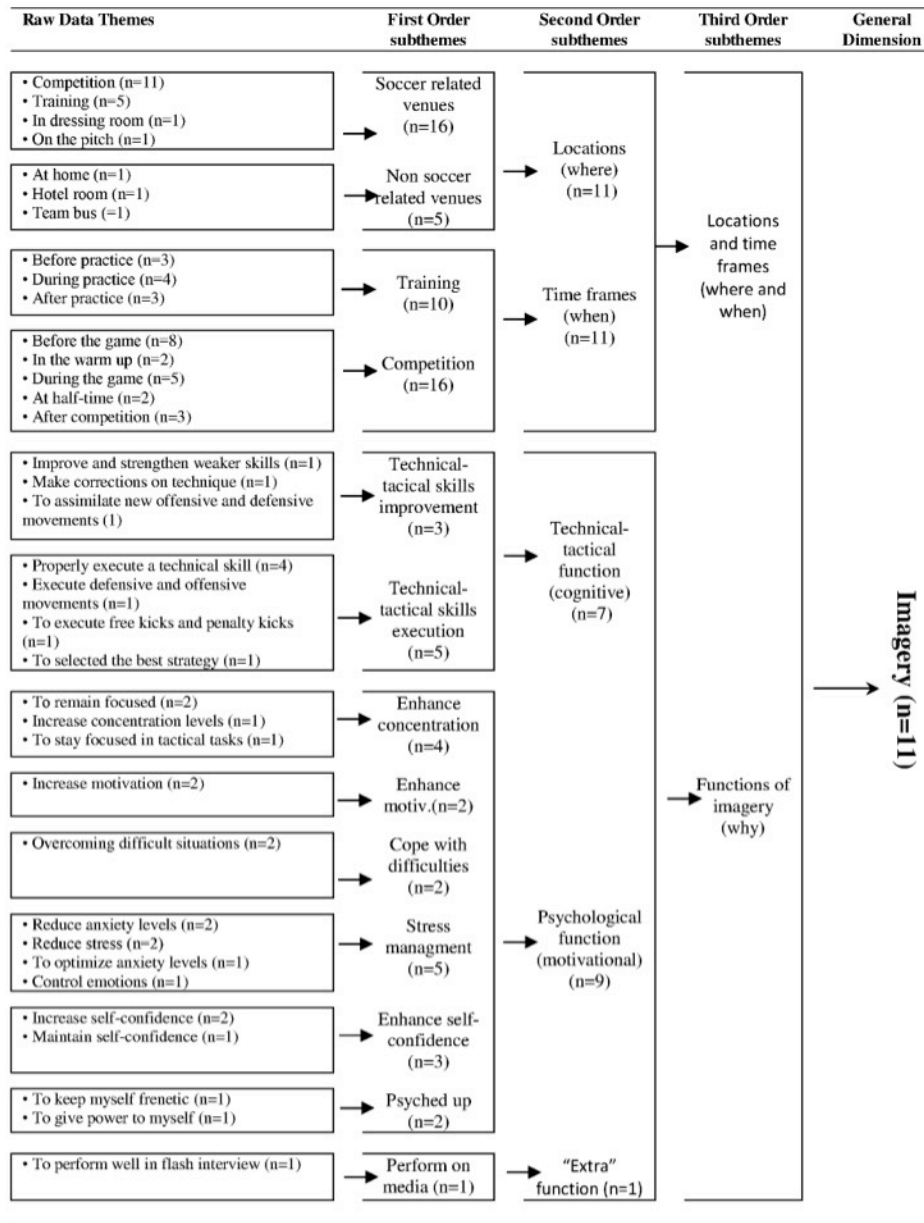


Figure 3. Hierarchical structure of the imagery general dimension

Relaxation

Relaxation was the least employed technique with only three participants reported its use (Figure 4). The soccer players mentioned employing relaxation only before the competition. A marked reduction was seen in the number of purposes relating to the use of relaxation compared to the previous three psychological techniques (i.e. self-talk, goal-setting and imagery). In fact, relaxation was only used by the participants to enhance concentration skills and to reduce stress and anxiety. For example one player stated: "I use some relaxation techniques to reduce the stress and anxiety levels. For example before the game I have a routine of listening to calm music and controlling my breathing and this conveys serenity".

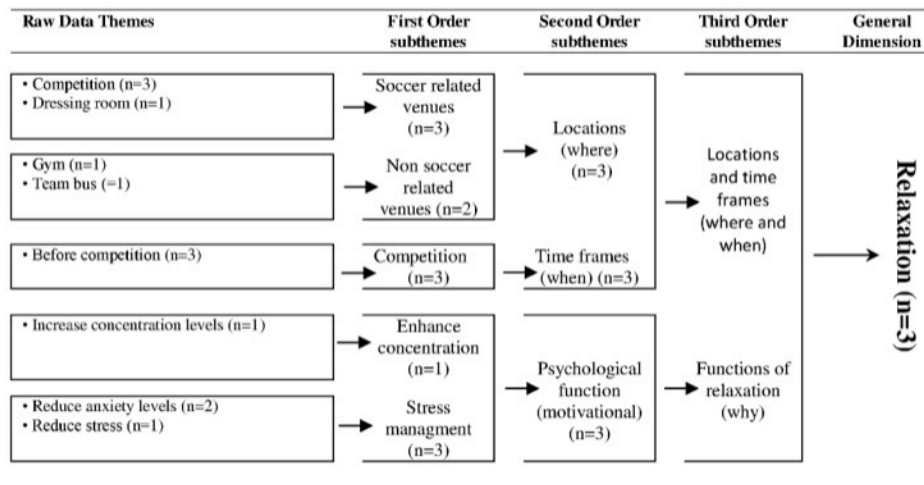


Figure 4. Hierarchical structure of the relaxation general dimension

DISCUSSION

The purpose of the current study was to explore whether, where, when and why Portuguese elite soccer players used the techniques of imagery, self-talk, goal setting and relaxation. Globally, the majority of the participants mentioned employing self-talk, imagery and goal-setting in their soccer routines. This can be considered an encouraging finding because PST literature has shown a positive influence of these techniques on soccer players' performance (e.g. Johnson et al., 2004; Munroe, Hall, Fishburne, Murphy, & Hall, 2012; Thelwell, Greenlees, & Weston, 2006, 2010). By contrast, participants highlighted a lack of use of relaxation techniques and this can be considered a cause of concern.

Consistent with previous studies in sport (Barr & Hall, 1992; Hall et al., 1990; Thomas, Murphy, & Hardy, 1999), elite soccer players mentioned a greater use of psychological techniques in competition setting when compared to the training setting. This finding seems to suggest that soccer players consider competition as more important than training and consequently reserve psychological techniques use for that setting. It is also possible that they believe that psychological techniques can only help them when they are competing. The lower use of psychological techniques in training setting pointed out by participants may raise some concerns because it compromises the implementation of an effective and systematic PST program. This highlights the need for sport psychologists to place a greater emphasis on quality practice when working with elite soccer players. Their intervention should not only stimulate the use of psychological techniques in training but also elucidate soccer players about the benefits of their use in this environment.

According to Frey, Laguna, and Ravizza (2003) an athlete's attitude toward psychological technique use is partially dependent on the coach's view of PST: "if a coach is consistently emphasizing the importance of competition over practice, the athlete may not realize the relationship between the two environments, or that the quality of practice has an effect on his or her performance in competition" (p. 123). Therefore sport psychologists should inform soccer coaches about the relationship between psychological techniques use in training and success in competition. The coach is the manager of the team and therefore has great influence on the psychological development of their athletes and teams. Furthermore, they spend more time with players than the sport psychologist and consequently they often have more opportunities to remind the players about using psychological techniques in training setting.

Results of the present study also showed that participants used goal-setting and imagery just prior to competing than any other time frame. This finding can be explained by how crucial the time prior to competing is for performance preparation. In contrast to these psychological techniques, participants reported using self-talk more extensively during the competition. A possible reason for these differences may have been because self-talk requires less time and effort to utilize than the others three psychological skills. According to Hardy et al. (2005), self-talk is a psychological skill that may inherently lend itself to use in time-restricted situations such as those found during training and competition.

With respect to the purposes that soccer employed psychological techniques, our findings highlighted two main functions, cognitive and motivational, that are consistent with the imagery and self-talk functions identified by Munroe et al. (2000) and Hardy et al. (2001). Regarding to the cognitive function, soccer players reported using self-talk, imagery and goal setting primarily for technical and tactical execution than technical and tactical improvement. Our sample was exclusively composed of elite soccer players that competed at the highest level. Therefore it was not surprising that they would be more concerned with properly executing technical and tactical skills than further improvement. This finding may also be connected with the fact that the players reported using the psychological techniques more in competition than in a training environment. In this context, Burton, Naylor, and Holliday (2001) proposed that enhanced learning and development are usually the primary focus in practice situations, while performing optimally or outperforming one's opponent is the main focus in competitive situations.

The soccer players also reported the use of the motivational function of self-talk, goal-setting and imagery. In all of the psychological techniques the motivational function was mentioned far more frequently than the cognitive ones. This finding highlighted the importance that the psychological preparation (motivational function) assumes for the Portuguese elite soccer players. In line with this Fonseca (1997) mentioned that due to the similarity of technical, physical and tactical skills of elite players from professional Portuguese soccer clubs, the psychological preparation assumes a high relevance in the achievement of soccer outcomes.

While the soccer players indicated using the three aforementioned psychological techniques to optimize several psychological skills, it should be noted that the majority of them used it to regulate their anxiety levels. The social economic framework that involves professional soccer exposes the elite players to high psychological pressure, and therefore it is not surprising that they used psychological techniques with this specific purpose (i.e. regulate their anxiety levels). Moreover, this finding may be again linked with the greater use of psychological techniques in the competition setting stressed by the participants.

Finally, results of this study highlighted a marked reduction in the number of participants who reported employing relaxation. This finding is not surprising because most athletes have never been taught the basic requisites of this technique or simply do not know how to relax on command (Burton & Raedeke, 2008). Future research should be conducted to determine if relaxation was used less often because Portuguese elite soccer players do not have the in depth knowledge of this psychological technique. If so, the practitioners (sport psychologists and coaches) assume an important role to teach and raise awareness of the elite soccer players for the importance of relaxation strategies and how to develop them. It would be useful to explain to them that relaxation can be used in both training and competition settings and with different purposes (Hanton, Thomas, & Mellalieu, 2009). To be effective, practitioners have to teach soccer players to develop relaxation skills that work quickly during training and competition (Burton & Raedeke, 2008).

An interesting finding revealed in the present study was the similarity between the functions (purposes) of self-talk, imagery, and goal setting. Similarly, PST literature showed that self-talk and imagery were used by athletes for many of the same reasons (Hardy et al., 2001; Munroe et al., 2000). Based on this assumption, Hardy et al. (2001) suggested that the use of these both techniques in combination would seem to be a logical approach. Therefore encouraging elite soccer players to use self-talk, imagery, and goal setting in combination would also seem to be a logical approach. At this level it is also important not to forget the relaxation technique because despite neglect by our participants, PST literature has seen an increase in the number of experimental studies supporting the positive influence of relaxation on soccer players performance (Thelwell et al., 2006, 2010).

Although we have presented separately the four psychological techniques analysed in the current study, it would be advantageous to integrate them within a single and systematic PST program. With respect to future research, the efficacy of the combined use of self-talk, imagery, goal setting and relaxation in elite soccer players performance should be investigated to confirm the previous suggestions.

CONCLUSIONS

Globally this study demonstrated that Portuguese elite soccer players employing self-talk, goal-setting, and imagery in their sport routines. On the other hand, they highlighted a lack of use of relaxation technique. In addition, results of the current study showed that the psychological techniques used were lower in training than in competition setting.

The current study emphasises the need to elucidate Portuguese elite soccer players of the importance and benefits of a regular and systematic use of psychological techniques. Sport psychologists should help soccer players to use the various psychological techniques, as well as, how to integrate them into training and competition environments. Furthermore, it is also important that those responsible for the soccer players' preparation (e.g. head coaches, assistant coaches) should understand the benefits of PST because it is these practitioners who are in the best position to encourage players to use psychological techniques in both training and competition settings.

REFERENCES

1. Barr, K. & Hall, C. (1992). The use of imagery by rowers. *International Journal of Sport Psychology*, 23, pp.243-361.
2. Burton, D., Naylor, S. & Holliday, B. (2001). Goal setting in sport: Investigation the goal effectiveness paradox. In R. N. Singer, H. A. Hausenblas & C. M. Janelle (Eds.), *Handbook of Sport Psychology* (pp.497-528). New York: Wiley.
3. Burton, D. & Raedeke, T. D. (2008). *Sport psychology for coaches*. Champaign, IL: Human Kinetics.
4. Burton, D., Weinberg, R., Yukelson, D. & Weigand, D. (1998). The goal effectiveness paradox in sport: Examining the goal practices of collegiate athletes. *The Sport Psychologist*, 12, 404-418.
5. Evans, L., Jones, L. & Mullen, R. (2004). An imagery intervention during the competitive season with an elite rugby union player. *The Sport Psychologist*, 18, pp.252-271.
6. Frey, M., Laguna, P. L. & Ravizza, K. (2003). Collegiate athletes' mental skill use and perceptions of success: An exploration of the practice and competition settings. *Journal of Applied Sport Psychology*, 15, pp.115-128.

7. Fonseca, A.M. (1997). A psicologia do desporto e o futebol: Nós e os outros [The psychology of sport and soccer: We and the others]. *Horizonte, Revista de Educação Física e Desporto*, 13, pp.31-39.
8. Gould, D. (2001). Goal setting for peak performance. In J. M. Williams (Ed.), *Applied sport psychology: personal growth to peak performance* (pp.190-228). Mountain View, CA: Mayfield.
9. Gould, D., Murphy, S., Tammen, V. & May, J. (1991). An evaluation of U.S. Olympic sport psychology consultant effectiveness. *The Sport Psychology*, 5, pp.111-127.
10. Greenspan, M. & Feltz, D.L. (1989). Psychological interventions with athletes in competitive situations: A review. *The Sport Psychologist*, 3, pp.219-236.
11. Hall, C., Rodgers, W. & Barr, K.A. (1990). The use of imagery by athletes in selected sports. *The Sport Psychologist*, 4, pp.1-10.
12. Hanton, S. & Jones, G. (1999). The effects of a multi-modal intervention program on performers: Pt. II. Training the butterflies to fly in formation. *The Sport Psychologist*, 13, pp.22-41.
13. Hanton, S., Thomas, O. & Mellalieu, S. (2009). Management of competitive stress in elite sport. In B. W. Brewer (Ed.), *Handbook of Sports Medicine and Science: Sport Psychology* (pp. 30-42). Springfield, MA: Wiley.
14. Hardy, J., Gammage, K. & Hall, C.R. (2001). A description of athlete self-talk. *The Sport Psychologist*, 15, pp.306-318.
15. Hardy, J., Hall, C.R. & Hardy, L. (2005). Quantifying athlete self-talk. *Journal of Sports Sciences*, 23, pp.905-917.
16. Hardy, L., Jones, G. & Gould, D. (1996). Understanding psychological preparation for sport: theory and practice of elite performers. Chichester: Jon Wiley & Sons.
17. Johnson, J.M., Hrycaiko, D.W., Johnson, G.V. & Halas, J.M. (2004). Self-talk and female youth soccer performance. *The Sport Psychologist*, 18, pp.44-59.
18. Layman, E.M.C. (1978). Meditation and sports performance. In W. F. Straub (Ed.), *Sport psychology: an analysis of athlete behaviour* (pp. 169-176). Ithaca, NY: Mouvement.
19. Lehrer, P.M. & Woolfolk, R. L. (1993). Principles and practice of stress management (2nd Ed). New York: Guilford.
20. Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. London: Sage.
21. Marshall, C. & Rossman, G.B. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
22. Maynard, I.W., Hemmings, B. & Evans, L. (1995). The effects of somatic intervention strategy on competitive state anxiety in semi-professional soccer players. *The Sport Psychologist*, 9, pp.51-64.
23. Munroe, K., Hall, C.R., Simms, S. & Weinberg, R. (1998). The influence of type of sport and time of season on athletes' use of imagery. *The Sport Psychologist*, 12, pp.440-449.
24. Munroe, K., Hall, C.R. & Weinberg, R.S. (2004). A qualitative analysis of the types of goals athletes set in training and competition. *Journal of Sport Behavior*, 27, pp.58-74.
25. Munroe, K., Hall, C., Fishburne, G., Murphy, L. & Hall, N. (2012). Effects of a cognitive specific imagery intervention on the soccer skill performance of young athletes: Age group comparisons. *Psychology of Sport and Exercise*, 13, pp.324-331.
26. Munroe, K., Giacobbi, P., Hall, C. & Weinberg, R. (2000). The four w's of imagery use: Where, when, why, and what. *The Sport Psychologist*, 14, pp.119-137.
27. Paivio, A. (1985). Cognitive and motivational functions of imagery in human performance. *Canadian Journal of Applied Sport Sciences*, 10(4), pp.22-28.
28. Patton, M. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks: Sage Publications.

29. Rodgers, W.M. Hall, C.R. & Buckolz, E. (1991). The effect of an imagery training program on imagery ability, imagery use, and figure skating performance. *Journal of Applied Sport Psychology*, 3, pp.109-125.
30. Rogerson, L. & Hrycaiko, W. (2002). Enhancing competitive performance of ice hockey goaltenders using centering and self-talk. *Journal of Applied Sport Psychology*, 14, pp.14-26.
31. Salmon, J., Hall, C. & Haslam, I. (1994). The use of imagery by soccer players. *Journal of Applied Sport Psychology*, 6(1), pp.116-133.
32. Sordoni, C., Hall, C. & Forwell, L. (2000). The use of imagery by athletes during injury rehabilitation. *Journal of Sport Rehabilitation*, 9, pp.329 – 338.
33. Sullivan, P.A. & Nashman, H.W. (1998). Self-perceptions of the role of USOC sport psychologists in working with Olympic athletes. *The Sport Psychology*, 12, pp.95-103.
34. Theodorakis, Y., Weinberg, R., Natsis, P., Douma, I. & Kazakas, P. (2000). The effects of motivational and instructional self-talk on improving motor performance. *The Sport Psychologist*, 14, pp.253–271.
35. Thelwell, R.C., Greenlees, I.A. & Weston, N.J.V. (2006). Using psychological skills training to develop soccer performance. *Journal of Applied Sport Psychology*, 18, pp.254-270.
36. Thelwell, R.C., Weston N.J.V., Greenlees, I. A., & Hutchings, N. V. (2008). A qualitative exploration of psychological-skills use in coaches. *The Sport Psychologist*, 22, pp.38-53.
37. Thelwell, R.C., Greenlees, I.A. & Weston, N.J.V. (2010). Examining the use of psychological skills throughout soccer performance. *Journal of Sport Behavior*, 33, pp.109-127.
38. Thomas, P.R., Murphy, S. M. & Hardy, L. (1999). Test of performance strategies: Development and preliminary validation of a comprehensive measure of athletes' psychological skills. *Journal of Sports Sciences*, 17, pp.697-711.
39. Vealey, R.S. (1994). Current status and prominent issues in sport psychology interventions. *Medicine and Science in Sports and Exercise*, 26, pp.495-502.
40. Vealey, R.S. (1988). Future directions in psychological skills training. *The Sport Psychologist*, 2, pp.318-336.
41. Vealey, R.S. (2007). Mental skills training in sport. In G. Tenenbaum, R. Eklund & R. Singer (Eds.), *Handbook of sport psychology*. New Jersey: Wiley.
42. Weinberg, R., Burton, D., Yukelson, D. & Weigand, D. (2000). Perceived goal setting practices of Olympic athletes: An exploratory investigation. *The Sport Psychologist*, 14, pp.279-295.
43. Weinberg, R.S. & Comar, W. (1994). The effectiveness of psychological interventions in competitive sports. *Sports Medicine*, 18(6), pp.406-418.
44. Weinberg, R. & Gould, D. (2011). *Foundations of sport and exercise psychology* (5th ed.). Champaign, IL: Human Kinetics.