ROLE PLAYED BY THE COACH IN THE ADOLESCENT PLAYERS' COMMITMENT

Paula ORTIZ MARHOLZ¹, Manuel GÓMEZ-LÓPEZ², Ignacio MARTÍN³,
Rafael Enrique REIGAL GARRIDO⁴, Alexandre GARCIA-MAS⁵, L. Javier CHIROSA¹

¹ Faculty of Sciences for Physical Activity and Sport, University of Granada, Spain.
E-mail: portizmarholz@yahoo.com, lchirosa@ugr.es

² Faculty of Sports Science, University of Murcia, Spain.
E-mail: mgomezlop@um.es

³ Faculty of Psychology, University of Granada, Spain.
E-mail: imartin@ugr.es

⁴ Research Group CTS-642, University of Granada, Spain.
E-mail: rafareigal@gmail.com

⁵ Faculty of Psychology, University of the Balearic Islands, Spain.
E-mail: alex.garcia@uib.es

Abstract: This study was designed to examine the role played by the coach in competitive sports by analyzing the motivational climate created in the team and its relationship with player commitment. Spanish versions of the questionnaires MCSYS (Motivational Climate Scale for Youth Sport; Smith, Cumming, & Smoll, 2008) and SCQe (Sport Commitment Questionnaire; Scalan, Simons, Carpenter, Schmidt, & Keeler, 1993) were administered to 929 male competitive soccer players, mean age of 12.2 years. According to the MCSYS scores, the players' perceived motivational climate was classified as four profiles defined by combinations of low or high mastery/ego (low/low, high/low, low/high and high/high). The results obtained indicate a relationship between perceived motivational climate and commitment to the game. The theoretical and practical implications of these findings are discussed in the light of the motivational climate generated by the coach in the sport context.

Key words: soccer, coach, motivational climate, sport commitment, satisfaction

Introduction

Unlike sport activities conducted in Physical Education classes, organized competitive sports are freely chosen by children, and certain commitment on the part of the child is needed. Within this context of skills and achievements, motivational factors play a key role in the long-term effects of sport participation on psychosocial development

(García-Mas et al., 2011). The physical and psychological well-being of an athlete is not automatically promoted (Duda & Balaguer, 2007; Quested & Duda, 2011), rather it depends upon the social settings in which it develops and is, in turn, closely linked to the role played by the coach and significant others (Roberts & Treasure, 2012; Sánchez-Miguel, Leo, Sánchez-Oliva, Amado, & Garcia-Calvo, 2013). The importance of the coach and his influence on athletes has been

widely addressed (Sousa, Cruz, Torregrosa, Vilches, & Viladrich, 2006). According to the approach adopted by the trainer, an athlete's satisfaction with and adherence to a given sport may be enhanced or compromised, and this may impact self-motivation, level of involvement and level of commitment (Martín-Albo, Núñez, & Navarro, 2003; Ortiz, Arriaza, & Jeria, 2011; Weiss, 2015). The consequence of all this is that the sport environment becomes a setting of socializing influences playing a pivotal role in forming a child's personal character (Torregrosa et al., 2007).

According to Castillo, Balaguer, Duda and García (2004), the social cognitive theory of goal orientations (Nicholls, 1989) is a conceptual framework that helps our understanding of the motives and processes whereby children take up a sports activity or abandon such an activity. Achievement goal theory tries to identify the different dispositional and environmental factors that affect achievement motivation in an athlete.

According to this construct, dispositional factors reflect the criterion used by athletes to measure their competence level and according to which they subjectively define success and failure. Situational factors refer to the signals emitted by persons such as relatives, friends, or coach that are perceived by the athlete and through which are defined the keys to success or failure, described by Ames (1992) as the motivational climate. Thus, depending on how the context is perceived by the athlete, a competitive, performing, ego-orientated or a mastery, task-orientated motivational climate is created (Ames, 1992; Newton, Duda, & Yin, 2000; Nicholls, 1989). It has been shown that the perception of a mastery motivational climate favors sport performance, enjoyment, satisfaction (Donkers, Martin, Paradis, & Anderson, 2015;

Sousa, Torregrosa, Viladrich, Villamarín, & Cruz, 2007), commitment (Leo, Sánchez, Sánchez, Amado, & García, 2009; Lukwu & Luján, 2011; Sánchez-Oliva, Leo, González-Ponce, Chamorro, & García-Calvo, 2012) and psychological well-being by improving confidence and self-esteem and by reducing anxiety (Balaguer, Duda, Atienza, & Mayo, 2002). In contrast, a climate striving to improve performance produces less psychological well-being, greater anxiety relative to performance and less satisfaction with the sport environment (Balaguer, Duda, & Crespo, 1999).

However, from a perspective of disposition, both goal orientations rather than being dichotomous show an orthogonal behavior (Nicholls, 1989). In other words, as explained by Cervelló, Escartí and Balagué (1999), when assessing motivational orientation we may find athletes simultaneously orientated towards varying intensities of both mastery and ego. Hence, athletes may vary their dispositional goal orientations according to their socializing experiences in the sport context (Castillo, Duda, Álvarez, Mercé, & Balaguer, 2011; Gómez-López, Granero-Gallegos, Baena-Extremera, & Abralles, 2014), as is the case of the motivational climate (Ames, 1992) set by the trainer.

Although such variations exist, this has not been reflected in most studies, which have concluded that if trainers wish to potentiate the greater well-being of their athletes, they should pursue a task-involved motivational climate that will orient players towards adopting mastery goals in their sport and at all costs avoid an ego-based motivational environment. However, although not yet clearly demonstrated, it is questionable whether an ego-orientated approach is so undesirable and damaging that it creates a

climate in which winning or losing are unattractive learning experiences.

Another important factor considered in the present study is commitment, which offers information about an athlete's level of involvement in the sport practiced. Sport commitment is defined as the wish and will to continue participating in a given sport (Scanlan & Simons, 1992; Scanlan, Simons, Carpenter, Schmidt, & Keeler, 1993) and it is composed of several factors that determine Enjoyment, which is defined as "a positive affective response to the sport experience that reflects generalized feelings such as pleasure, liking and fun"; Involvement alternatives, which is defined as "the attractiveness of the most preferred alternative(s) to continued participation in the current endeavor"; Personal investment is defined as "personal resources that are put into the activity which cannot be recovered if participation is discontinued"; Involvement opportunities are defined as "valued opportunities that are present only through continued involvement"; and Social constraints is defined as "social expectations or norms which create feelings of obligation to remain in the activity" (Scanlan et al., 1993). Consequently and as assumed here, sport commitment is an indicator of adherence or non-abandonment. There is evidence to suggest that the greater the commitment of athletes, the lower the likelihood that they abandon the sport and the greater their satisfaction with the given activity (Cecchini, González, & Montero, 2007; Granero-Gallegos, Baena-Extremuera, Gómez-López, & Abalde, 2014; Sousa et al., 2007). Other studies confirm that the type of sport can be a determining factor of the sport commitment in young athletes (Sánchez, Leo, Amado, Sánchez, & García, 2011).

We should highlight the important role played by significant persons in the athlete's environment, especially the coach. Thus, the extent of an athlete's predisposition will be determined by the characteristics of the learning environment.

The first objective of the present study was, thus, to examine in our study population different profiles of the perceived situational (motivational) climate created by the coach that could influence learning in young players of team games (Taliaferro, Rienzo, & Donovan, 2010). Its second objective was to relate possible differences in such perceived motivational climates, in terms of sport commitment, created by the coach.

Methods

Participants

The subjects enrolled were 929 male soccer players aged 10 to 14 years ($M = 12.2$; $SD = 1.3$) belonging to different clubs or playing soccer as an extracurricular activity in Chile.

Instruments

To assess the players' perception of the motivational climate created by their coaches we used the Spanish version of the Motivational Climate Scale for Youth Sports (MCSYS; Smith, Cumming, & Smoll, 2008), validated in Spain by García-Mas et al. (2011). This questionnaire uses a Likert scale from 1 to 5 to measure agreement or disagreement with statements related to individual player behavior promoted by the coach. The tool comprises 14 items grouped into the two main scales – perception of an ego-orientated climate (7 items; $\alpha = .67$) and perception of a

mastery-orientated climate (7 items; $\alpha = .73$). The alpha coefficients provided in brackets are the Cronbach's alpha coefficients recorded in the present investigation and reflect the internal consistency, or reliability, of the corresponding scale. Our rates were lower than other studies, however they are borderline acceptable indices. Based on the points awarded to these two scales, four combined profiles of perceived motivational climate were established: low mastery/low ego (lo/lo), low mastery/high ego (lo/hi), high mastery/low ego (hi/lo) and high mastery/high ego (hi/hi).

The level of player commitment was measured using the Spanish adaptation (SCQe; Sousa et al., 2007) of the original Sport Commitment Questionnaire (SCQ; Scanlan et al., 1993). Furthermore, it has also been adapted and validated in other languages such as Portuguese (Sousa, Viladrich, Gouveia, Torregrosa, & Cruz, 2008). This tool assesses the following 6 factors (Cronbach's alpha coefficients determined here are given in brackets): sport enjoyment (SE) (4 items $\alpha = .77$); involvement alternatives (IA) (4 items $\alpha = .59$); personal investment (PI) (3 items $\alpha = .44$); involvement opportunities (IO) (4 items $\alpha = .67$); social constraints (SC) (7 items $\alpha = .82$) and sport commitment (C) (6 items $\alpha = .73$).

Scores were awarded on a Likert scale from 1 to 5 according to the level of agreement or disagreement with statements measuring each factor. An example of a sport enjoyment item is "I like playing this season". An alpha value between 0.5 and 0.6 may be sufficient in the early stages of research (Huh, Delorme, & Reid, 2006; Nunnally, 1967). However, some factors obtained will be considered with certain caution, in terms of the results and conclusions. Specifically, the personal invest-

ment factor was not included owing to its poor internal consistency. The involvement alternatives factor was considered with the precautions of an index at the boundary. Involvement opportunities, however, had a better index. Finally, to characterize the study population, a questionnaire was designed to collect socio-demographic data from the participants.

Recently Scanlan, Chow, Sousa, Scanlan and Knifsend (2016), have established psychometric properties of the Sport Commitment Questionnaire-2 (SCQ-2). This new instrument measures the updated SCM model (Scanlan, Russell Scanlan, Klunchoo, & Chow, 2013) and replaces the obsolete SCQ, which evaluated the original SCM (Scanlan, Simons, Carpenter, Schmidt, & Keeler, 1993).

Procedures

The study design was cross-sectional. Two different protocols were established for data collection at soccer clubs and schools. Both protocols were approved by the ethics committee of the Universidad de Playa Ancha de Valparaíso, and adhered to the tenets of the declaration of Helsinki.

Once informed consent was obtained from each participant, the date, time and place was scheduled for the questionnaires. The soccer players were informed that their participation was voluntary and that their replies would be confidential. Questionnaires were completed always in the absence of the coaches. This procedure took approximately 25 minutes. The principal investigator was present when the questionnaires were completed and insisted that during this time the children could ask about any possible problems they might have.

Data Analysis

Descriptive statistics (mean and standard deviation), the analysis of reliability of each scale and univariate ANOVA for each dependent variable factor (the four profiles) are shown. When the result is significant, pairwise comparisons were performed. To confirm the internal consistency of the questionnaires, an exploratory factorial analysis of the different items comprising each instrument component was performed. Subsequent to this, the variables mastery climate and ego climate were classified as two categories using the central measure statistic, or median, and these were combined to give the four individual profiles.

Finally, to identify possible significant differences in the dependent variables of sport commitment among the four profile groups, we conducted an analysis of variance, post

hoc multiple range tests and pairwise comparisons. All statistical tests were performed using the software package SPSS 15.0. Significance was set at $p < .01$.

Results

To create the four profiles, we used the median scores obtained in the scales mastery motivational climate and ego motivational climate ($M = 4.33$, $SD = .56$ and $M = 2.52$, $SD = .72$ respectively), as suggested by Duda (2001) and García-Mas and Gimeno (2008). The compositions in each of the four profiles were similar, though the profile high mastery/low ego (hi/lo) showed the most frequent composition ($n: 270$; 29.1%), followed by lo/lo with 256 subjects (27.5%). The profiles showing the lowest compositions were lo/hi and hi/hi and included 230 (24.8%) and 173 (18.6%) subjects, respectively.

Table 1 Means and standard deviations of the scores obtained in the Sport Commitment Questionnaire items for the study population and for the four perceived motivational climate profiles of mastery/ego

	lo/lo	lo/hi	hi/lo	hi/hi	Total
	<i>M</i> (SD)	<i>M</i> (SD)	<i>M</i> (SD)	<i>M</i> (SD)	
SE	18.11 (2.69)	17.23 (3.11)	19.13 (1.82)	18.74 (2.26)	4.59 (.64)
IO	16.14 (3.15)	15.81 (3.09)	17.73 (2.59)	17.35 (2.82)	4.20 (.74)
SC	18.27 (6.74)	21.85 (5.99)	18.29 (7.61)	22.91 (7.72)	2.86 (1.04)
IA	9.85 (3.77)	11.94 (3.60)	10.18 (3.76)	11.72 (4.36)	2.70 (.99)
C	25.41 (3.93)	24.83 (4.25)	27.29 (3.00)	27.13 (3.72)	4.36 (.64)

Table 2 *F value, significance, effect size and power*

	<i>F</i>	<i>Sig</i>	<i>Effect size</i>	<i>Power</i>
SE	25.841	.001	0.728	1
IO	24.073	.001	0.166	0.994
SC	25.749	.001	0.399	1
IA	17.655	.001	0.218	0.999
C	25.356	.001	0.212	0.999

According to the Pearson chi-squared test ($\chi^2 = 6.458$; $p = .11$), a relationship was detected between the variables mastery climate and ego climate.

Means and standard deviations of the scores awarded for sport commitment recorded for each motivational climate profile and for the whole population are provided in Table 1.

Our analysis of variance identified significant differences in all the variables examined among the four profiles ($p < .01$). Table 2 provides the *F* values, significance, ANOVA ef-

fect size and power values obtained for such effects.

Differences among profiles in variable means were identified using post hoc multiple range tests and pairwise comparisons. The following figures illustrate the differences detected in each sport commitment variable among the four profiles in which asterisks are used to indicate significant differences in means at $p < .01$.

In Figure 1, it may be observed that the greatest level of enjoyment (SE) was detected for the mastery/ego profile hi/lo. In other

Figure 1 Enjoyment levels self-reported in the four profiles of perceived motivational climate. * $p < .01$

words, the participants who perceived that their coaches orientated success more towards an attitude of personal improvement and less towards results or performance showed a greater level of enjoyment than those whose coaches focused little on both mastery and performance (lo/lo). Nevertheless, players assigned to this last profile showed greater enjoyment than individuals with coaches who place little importance on mastery but create a climate more oriented towards boosting ego (low mastery/high ego). This last profile was associated with the lowest level of enjoyment.

Figure 2 provides the mean scores obtained for the involvement opportunities factor (IO) in the four climate perception profiles. This bar chart illustrates significant

differences in IO between lo/lo ($M = 16.14$, $SD = 3.15$) and hi/lo ($M = 17.73$, $SD = 2.59$) or hi/hi ($M = 17.35$, $SD = 2.82$). That is, when coaches create a climate of low motivation, players feel they have fewer involvement opportunities than those who perceive a task-oriented rather than ego-oriented motivational climate or one of generally high motivation. In turn, significant difference in this variable emerged between the mastery/ego profiles lo/hi ($M = 15.81$, $SD = 3.09$) and hi/lo or hi/hi. This means that in a climate in which competitiveness and motivation from an outside perspective are promoted, players perceive they have fewer opportunities to participate than when the climate created by a coach is one of inner motivation or generally high motivation.

Figure 2 Involvement opportunities self-reported in the four profiles of perceived motivational climate. * $p < .01$

Figure 3 depicts significant differences in mean scores awarded to the factor social constraints between the mastery/ego profiles lo/lo ($M = 18.27$, $SD = 6.74$) and lo/hi ($M = 21.85$, $SD = 5.99$) or hi/hi ($M = 22.91$, $SD = 7.72$). This means that in perceived climates of low general motivation, individuals report less social pressure than in a training climate in which competitiveness and a more external motivation perspective are focused on or in a highly motivated climate. It was also observed that when the children perceived a more ego-oriented motivational climate (lo/hi), they felt greater social constraints than when their coaches created a more task-oriented climate (hi/lo) ($M = 18.29$, $SD = 7.61$). Finally, significant differences in this variable emerged between the hi/lo and hi/hi profiles, that is, in climates conducive to self-

improvement, social constraints were perceived as less important than in climates focusing on high motivation.

Results obtained for the fourth commitment variable examined, involvement alternatives (IA; Figure 4), indicate significant differences for the mastery/ego profiles lo/lo ($M = 9.85$, $SD = 3.77$) versus lo/hi ($M = 11.94$, $SD = 3.60$) or versus hi/hi ($M = 11.72$, $SD = 4.36$). Thus, lower scores for involvement alternatives were observed for the profile lo/lo indicating that a lower motivation climate induces soccer players to consider other activities attractive in smaller measure than those training in a more competitive or highly motivated climate. The scores obtained for IA were also significantly higher for the profile lo/hi than for hi/lo ($M = 10.18$, $SD = 3.76$), that is, in a coaching climate in which motivation from

Figure 3 Social constraints self-reported in the four profiles of perceived motivational climate. * $p < .01$

Figure 4 Involvement alternatives self-reported in the four profiles of perceived motivational climate. * $p < .01$

Figure 5 Sport commitment self-reported in the four profiles of perceived motivational climate. * $p < .01$

an internal perspective is promoted. Participants assigned to the latter profile perceived other activities as less attractive than individuals assigned to the high mastery/high ego perceived motivational climate profile (hi/hi).

Finally, Figure 5 reveals that a general lo/lo mastery/ego climate ($M = 25.41$, $SD = 3.93$) is significantly less conducive to sport commitment than a climate that preferentially promotes motivation from an inner perspective: hi/lo ($M = 27.29$, $SD = 3.00$) or a highly motivating climate: hi/hi ($M = 27.13$, $SD = 3.72$). It may also be observed that a competitive climate that preferentially directs motivation from an external perspective: lo/hi ($M = 24.83$, $SD = 4.25$) leads to lower sport commitment than a climate preferentially oriented toward an internal perspective (hi/lo) and one of generally high motivation (hi/hi).

Discussion

Our investigation proposes a new approach to assessing the influence of motivational climate created by a coach in an athlete's commitment to the sport practiced. The first objective was to describe the possible motivational climates created by coaches through the definition of four categories of the focus perceived by athletes in terms of combinations of a lesser or greater mastery- or ego-oriented climate. After historically assuming that both goal orientations were negatively correlated (Murphy & Alexander, 2000) or even that the two orientations were at opposing ends of a continuum (Dweck & Legget, 1988), it has been finally established that the two show an orthogonal behavior (Nicholls, 1989; Roberts, Treasure, & Balague, 1998) according to significant differences observed of both goal

and motivational climate orientations (Cervelló et al., 1999). Hence, an athlete can show mastery and ego orientations that are both low or both high, or alternatively one may be high and the other low or vice-versa. In other words, an orientation of one type is not acquired at the expense of the other (Duda & Nicholls, 1992).

To date, most studies have addressed motivational orientations in terms of their dispositional variable yet few authors have examined the orthogonal nature of motivational climate. Indeed, this has prompted much debate over relationships between the two orientation types and their independence (Hardy, 1997) or over the link between the orientation perceived by significant others and the motivational climate (Peiro, Escartí, & Duda, 1997).

Two classical profiles of motivational climate exist (task-oriented and ego-oriented) and results of studies have been generally interpreted according to the dominant profile, though not in the absence of the other profile. In other words, the contribution, albeit small, of the non-dominant profile to sports practice was not considered. Accordingly, as proposed by several authors (Duda, 2001; García-Mas & Gimeno, 2008), in a preliminary analysis we divided both profiles into low and high intensity depending on the mean scores obtained in the MCSYS questionnaire so that we could combine such classifications to define four profiles of perceived motivational climate.

The findings of our study are consistent with those of other reports in terms of the greater role played by a mastery climate than a performing climate (Boixadós, Cruz, Torregrosa, & Valiente, 2004; Moreno, Cervelló, & González-Cutre, 2008; Torregrosa, Sousa, Viladrich, Villamarín, &

Cruz, 2008; Torregrosa et al., 2011). This was reflected in the distributions of the two perceived motivational climates. However, according to the data analysis approach used here, the athletes were more homogeneously distributed across the four combined profiles.

In terms of the second objective of our study, we observed that the perceived mastery/ego climates hi/lo and hi/hi emerged as enhancers of variables that favored the players' commitment to soccer, such as sport enjoyment (SE), involvement opportunities (IO) and sport commitment (C). Other authors have reported that motivational climate is a predictor of sports commitment in young athletes (Torregrosa et al., 2011). In agreement with the results of another study (Torregrosa et al., 2011), our data indicate that the perception of a task-oriented motivational climate built on individual progress, learning different skills, effort and cooperation is related to an athlete's commitment, reflecting the determinant role played by the coach. Several studies have shown that a task-oriented learning context fostered by the coach leads to athlete enjoyment, satisfaction and commitment (Boixadós et al., 2004; Torregrosa et al., 2008). And Studies like the one developed by Almagro, Saenz-Lopez, González-Cutre and Moreno-Murcia (2011) along with that of Belando et al. (2016) confirm that intrinsic motivation predicts sport commitment.

In contrast, the perceived mastery/ego climate profiles of lo/hi and lo/lo defined here emerged as less conducive to sports commitment, consistent with prior reports (Leo et al., 2011; Vazou, 2010). This means that when a coach fosters an ego or performing climate, a less skilled athlete will be unmotivated and seek another type of activity, thus,

increasing the likelihood of abandoning the sport in question (Cervelló, Santos-Rosa, Jiménez, García, & Iglesias, 2007). Our data are inconsistent with those described by Papaioannou, Marsh and Theodorakis (2004) who found that the mastery/ego combination hi/hi had positive effects on an athlete's physical self-concept and negative effects on enjoyment and attitude towards physical exercise.

Regardless of the level of mastery, combined climates of high ego indicated that an atmosphere focused on performance is related to factors that have been classically considered negative for sports commitment, such as social constraints or involvement alternatives.

Our study relates a motivational climate of performance with social constraints and turning to other activities in line with the results of studies by Sousa et al. (2007), Smith et al. (2008) and Leo et al. (2011).

Interestingly, significantly reduced social constraints were detected in the mastery/ego climate profile lo/lo compared with the profiles hi/hi and lo/hi. This suggests that peer or other pressures driven by match results constitutes a factor that affects a player's perception of the motivational climate created by the coach. However, the effect of this variable on sports commitment continues to prompt discussion (Sousa et al., 2007). This has determined its new consideration as "constrained commitment" in a model that is presently being validated (Sousa et al., 2013; Scanlan et al., 2013).

Conclusions

The results of this study indicate that a coach should try to create an atmosphere of enjoyment and satisfaction in a given sport

by improving a player's self-referred perception of competence. In other words, the player should consider experiences as subjective and that any assessment of improvement or achievement is also subjective. However, we would argue that at elite levels of sport, a climate calling upon an athlete's ego can be motivational such that the ideal climate proposed is not incompatible with the coach using strategies that evoke the use of external information and criteria.

Developing a commitment for a given sport is essential for adherence and for avoiding withdrawal from the sport's activity. Traditionally, this factor was related to motivation. Our data reveal adequate coach-player interrelations in relation to the perceived motivational climate. We suggest that coaches should pursue a motivational climate of mastery despite our data indicating no detrimental effects of a performing climate.

As a limitation of our study, to determine the impacts of motivational climate on soccer players in this age group, significant others should have been considered such as parents and peers. A further limitation is that we failed to compare observations with information appearing in the players' records or provided by the coaches themselves.

In future studies it would be interesting to confirm the four profiles of perceived motivational climates shown by these young soccer players. In addition, short intervention studies should address, along with players, coaches and significant others, the interaction between parents and coach in creating the motivational climate. In this manner, training programs could be designed for both parents and coaches, promoting a better understanding of the importance of player training in terms of developing the ideal motivational climate. It could also made through

a confirmatory factor analysis a studio to confirm the structure of measuring instruments used in population and age applied.

Finally, it could be assessed how these socio-environmental characteristics help predict future intentions of participation in this and other sports by increasing the sample size and using a mixed population of boys and girls.

Received June 29, 2015

References

- Almagro, B. J., Sáenz-López, P., González-Cutre, D., & Moreno-Murcia, J. A. (2011). Perceived motivational climate, psychological needs and intrinsic motivation as predictors of sport commitment in adolescent athletes. *RICYDE. Revista Internacional de Ciencias del Deporte*, 7(25), 250-265.
- Ames, C. (1992). Achievement goals, motivational climate, and motivational processes. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 161-176). Champaign, Ill.: Human Kinetics.
- Balaguer, I., Duda, J. L., Atienza, F. L., & Mayo, C. (2002). Situational and dispositional goals as predictors of perceptions of individual and team improvement, satisfaction and coach ratings among elite female handball teams. *Psychology of Sport and Exercise*, 3, 293-308.
- Balaguer, I., Duda, J. L., & Crespo, M. (1999). Motivational climate and goal orientations as predictors of perceptions of improvement, satisfaction and coach ratings among tennis players. *Scandinavian Journal of Medicine and Science in Sports*, 9, 1-8.
- Belando, N., Ferriz-Morel, R., Rivas, S., Almagro, B. J., Sáenz-López, P., Cervelló, E., & Moreno, J. A. (2016). Sport commitment in adolescent soccer players. *Motricidade*, 11(4), 3.
- Boixadós, M., Cruz, J., Torregrosa, M., & Valiente, L. (2004). Relationship among motivational climate, satisfaction, perceived ability and fair play attitudes in young soccer players. *Journal of Applied Sport Psychology*, 16(4), 301-317.
- Castillo, I., Duda, J. L., Álvarez, M. S., Mercé, J., & Balaguer, I. (2011). Clima motivacional, metas

- de logro de aproximación y evitación y bienestar en futbolistas cadetes. *Revista de Psicología del Deporte*, 20(1), 149-164.
- Cecchini, J. A., González, C., & Montero, J. (2007). Participación en el deporte y fair play. *Psicothema*, 19, 57-64.
- Cervelló, E., Escartí, A., & Balagué, G. (1999). Relaciones entre la orientación de meta disposicional y la satisfacción con los resultados deportivos, las creencias sobre las causas de éxito en deporte y la diversión con la práctica deportiva. *Revista de Psicología del Deporte*, 8(1), 7-19.
- Cervelló, E., Santos-Rosa, F. J., Jiménez, R., García, T., & Iglesias, D. (2007). Young tennis players' competitive task involvement and performance: The role of goal orientations, contextual motivational climate, and coach-initiated motivational climate. *Journal of Applied Sport Psychology*, 19, 304-321.
- Donkers, J. L., Martin, L. J., Paradis, K. F., & Anderson, S. (2015). The social environment in children's sport cohesion, social acceptance, commitment, and enjoyment. *International Journal of Sport Psychology*, 46(4), 275-294.
- Duda, J. L. (2001). Goals perspectives research in sport: Pushing the boundaries and clarifying some misunderstandings. In G. C. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 129-182). Champaign, IL: Human Kinetics.
- Duda, J. L., & Balaguer, I. (2007). The coach-created motivational climate. In S. Jowett, & D. Lavallee (Eds.), *Social psychology of sport*, (pp. 117-130). Champaign, IL: Human Kinetics.
- Duda, J. L., & Nicholls, J. G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology*, 84, 290-299.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- García-Mas, A., & Gimeno, F. (2008). La Teoría de Orientación de Metas y la Enseñanza de la Educación Física: Consideraciones prácticas. *Revista Latinoamericana de Psicología* 40(3), 511-522.
- García-Mas, A., Palou, P., Gili, M., Ponseti, X., Borrás, P. A., Vidal, J., Cruz, J., Torregrosa, M., Villamarín, F., & Sousa, C. (2010). Commitment, enjoyment and motivation in young soccer competitive players. *The Spanish Journal of Psychology*, 13(2), 609-616.
- García-Mas, A., Palou, P., Smith, R. E., Ponseti, X., Almeida, P., Lameiras, J., & Leiva, A. (2011). Ansiedad competitiva y clima motivacional en jóvenes futbolistas de competición, en relación con las habilidades y el rendimiento percibido por sus entrenadores. *Revista de Psicología del Deporte*, 20(1), 197-207.
- Gómez-López, M., Granero-Gallegos, A., Baena-Extremera, A., & Abrales, J. A. (2014). Goal orientation effects on elite handball players motivation and motivational climate. *Procedia - Social and Behavioral Sciences*, 132, 434-440.
- Granero-Gallegos, A., Baena-Extremera, A., Gómez-López, M., & Abrales, J. A. (2014). Psychometric properties of the "Sport Satisfaction Instrument (SSI)" in female athletes: Predictive model of sport commitment. *Psychological Reports*, 115(1), 148-164.
- Hardy, L. (1997). Three myths about applied consultancy work. *Journal of Applied Sport Psychology*, 9, 277-294.
- Huh, J., Delorme, D. E., & Reid, L. N. (2006). Perceived third person effects and consumer attitudes on preventing and banning DTC advertising. *Journal of Consumer Affairs*, 40(1), 90-116. doi: <http://doi.org/dpj596>
- Leo, F. M., Sánchez, P. A., Sánchez, D., Amado, D., & García, T. (2009). Influence of the motivational climate created by coach in the sport commitment in youth basketball players. *Revista de Psicología del Deporte*, 3(18), 375-378.
- Leo, F. M., Sánchez, P. A., Sánchez, D., Amado, D., & García, T. (2011). Análisis de la incidencia del clima motivacional y la cohesión de equipo sobre el grado de compromiso de jóvenes futbolistas. *Cultura, Ciencia y Deporte*, 16(6), 5-13.
- Lukwu, R. M., & Luján, J. F. G. (2011). Sport commitment and adherence: A social-cognitive analysis. *Revista Internacional de Ciencias del Deporte*, 25(7), 277-286.
- Martín-Albo, J., Núñez, J. L., & Navarro, J. G. (2003). La evolución motivacional como criterio discriminante en los deportes. *Revista Latinoamericana de Psicología*, 35, 139-150.
- Moreno, J. A., Cervelló, E., & González-Cutre, D. (2008). Relationships among goal orientations, motivational climate and flow in adolescent athletes: Differences by gender. *The Spanish Journal of Psychology*, 11, 181-191.
- Murphy, P. K., & Alexander, P. A. (2000). A motivated exploration of motivation terminology. *Contemporary Educational Psychology*, 25, 3-53.
- Newton, M., Duda, J. L., & Yin, Z. (2000). Examination of the psychometric properties of the

- Perceived Motivational Climate in Sport Questionnaire-2 in a sample of female athletes. *Journal of Sports Sciences*, 18, 275-290.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge, MASS: Harvard University Press.
- Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill
- Ortiz, P., Arriaza, E., & Jeria, V. (2011). Nivel de compromiso deportivo en tenistas y futbolistas entre 10 y 14 años. *Summa Psicológica UST*, 2(8), 53-60.
- Papaioannou, A., Marsh, H., & Theodorakis, Y. (2004). A multilevel approach to motivational climate in physical education and sport setting: An individual or a group level construct? *Journal of Sport & Exercise Psychology*, 26, 90-118.
- Peiró, C., Escartí, A., & Duda, J. L. (1997). Significant others socializing influences on Spanish adolescents athletes' goal orientations. In R. Lidor, & M. Bar-Eli (Eds.), *Innovations in sport psychology: Linking theory and practice. Proceedings of the IX World Congress of Sport Psychology, Part II* (pp. 549-551). Netanya, Israel: Wingate Institute.
- Quested, E., Ntoumanis, N., Viladrich, C., Haug, E., Ommundsen, Y., Van Hoya, A., & Duda, J. L. (2014). Intentions to drop-out of youth soccer: A test of the basic needs theory among European youth from five countries. *International Journal of Sport and Exercise Psychology*, 11(4), 395-407.
- Quested, E., & Duda, J. L. (2011). Enhancing children's sport experiences and personal development: A motivational perspective. In R. Bailey & I. Stafford (Eds.), *Coaching children in sport* (pp. 123-138). New York, NY: Routledge.
- Roberts, G. C. (1992). Motivation in sport and exercise: Conceptual constraints and conceptual convergence. In G. C. Roberts (Ed.), *Motivation in sport and exercise*. Champaign, IL: Human Kinetics.
- Roberts, G. C., Treasure, D. C., & Balagué, G. (1998). Achievement goal in sport: The development and validation of the perception of success questionnaire. *Journal of Sport Sciences*, 16, 337-347.
- Roberts, G. C., & Treasure, D. (2012). *Advances in motivation in sport and exercise* (3rd ed.). Leeds: Human Kinetics.
- Sánchez, D., Leo, F. M., Amado, D., Sánchez, P. A., & García, T. (2011). La modalidad deportiva como factor determinante de la motivación, el compromiso y la deportividad en adolescentes. *Movimiento Humano*, 1, 43-55.
- Sánchez-Oliva, D., Leo, F. M., González-Ponce, I., Chamorro, J. M., & García-Calvo, T. (2012). Analizando la implicación deportiva en jóvenes jugadores de baloncesto: Un análisis desde la Teoría de la Autodeterminación. *Cuadernos de Psicología del Deporte*, 12(Sup.1), 57-62.
- Sánchez-Miguel, P. A., Leo, F. M., Sánchez-Oliva, D., Amado, D., & García-Calvo, T. (2013). The importance of parents' behavior in their children's enjoyment and amotivation in sports. *Journal of Human Kinetics*, 36(1), 169-177.
- Scanlan, T. K. & Simons, J. P. (1992). The construct of sport enjoyment. In G.C. Roberts (Ed.), *Motivation in Sport and Exercise* (pp. 199-215). Champaign, IL: Human Kinetics.
- Scanlan, T. K., Simons, J. P., Carpenter, P. J., Schmidt, G. W., & Keeler, B. (1993). The sport commitment model: Measurement development for the youth-sport domain. *Journal of Sport and Exercise Psychology*, 15, 16-38.
- Scanlan, T., Russell, D., Scanlan, L., Klunchoo, T., & Chow, G. (2013). Project on Elite Athlete Commitment (PEAK): IV. Identification of New Candidate Commitment Sources in the Sport Commitment Model. *Journal of Sport & Exercise Psychology*, 35(5), 525-535.
- Scanlan, T., Chow, G., Sousa, C., Scanlan, L. A., & Knifsend, C. A. (2016). The development of the Sport Commitment Questionnaire-2 (English version). *Psychology of Sport and Exercise*, 22, 233-246.
- Smith, R. E., Cumming, S. P., & Smoll, F. L. (2008). Development and validation of the Motivational Climate Scale for Youth Sports. *Journal of Applied Sport Psychology*, 20(1), 116-136.
- Sousa, C., Cruz, J., Torregrosa, M., Vilches, D., & Viladrich, C. (2006). Evaluación conductual y programa de asesoramiento personalizado a entrenadores (PAPE) de deportistas. *Revista de Psicología del Deporte*, 15, 263-278.
- Sousa, C., Torregrosa, M., Viladrich, C., Villamarín, F., & Cruz, J. (2007). The commitment of young soccer players. *Psicothema*, 19(2), 256-262.
- Sousa, C., García-Mas, A., Sánchez-Miguel, P., & Lois, G. (2013). Compromisso Desportivo: Passado, presente e futuro em Espanha e Portugal. *Revista de Psicología del Deporte*, 22(2), 525-531.
- Sousa, C., Viladrich, C., Gouveia, M. J., Torregrosa, M., & Cruz, J. (2008). Estrutura interna da versão portuguesa do Sport Commitment Questionnaire

- (SCQ) e Funcionamento Diferencial dos Itens (DIF) com a versão espanhola. *Portuguese Journal of Sport Science*, 8(1), 22-33.
- Taliaferro, L., Rienzo, B., & Donovan, K. (2010). Relationships between youth sport participation and selected health risk behaviors from 1999 to 2007. *Journal of School Health*, 80, 399-410.
- Torregrosa, M., Cruz, J., Sousa, C., Viladrich, C., Villamarín, F., García-Mas, A., & Palou, P. (2007). La influencia de padres y madres en el compromiso deportivo de futbolistas jóvenes. *Revista Latinoamericana de Psicología*, 39(2), 227-237.
- Torregrosa, M., Sousa, C., Viladrich, C., Villamarín, F., & Cruz, J. (2008). El clima motivacional y el estilo de comunicación del entrenador como predictores del compromiso en futbolistas jóvenes. *Psicothema*, 20(2), 254-259.
- Torregrosa, M., Viladrich, C., Ramis, Y., Azócar, F., Latinjak, A. T., & Cruz, J. (2011). Efectos en la percepción del clima motivacional generado por los entrenadores y compañeros sobre la diversión y el compromiso. Diferencias en función de género. *Revista de Psicología del Deporte*, 20(1), 243-255.
- Vazou, S. (2010). Variations in the perceptions of peer and coach motivational climate. *Research Quarterly for Exercise and Sport*, 81, 199-211.
- Weiss, W. N. (2015). Competitive-level differences on sport commitment among high school and collegiate-level athletes. *International Journal of Sport and Exercise Psychology*, 13(3), 286-303.