

Relationships between empowering/disempowering motivational climate, motivational orientation, and the psychological profile of young football players

Relaciones entre el clima motivacional empowering/disempowering, la orientación motivacional y el perfil psicológico de jugadores jóvenes de fútbol

Relações entre o clima motivacional empowering/disempowering, a orientação motivacional e o perfil psicológico dos jovens jogadores de futebol

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Abstract

Psychological skills of athletes determine their sporting performance. However, the development of these skills requires a learning process, influenced by the athlete's environment. The aim of this study was to investigate the relationships between an empowering and disempowering climate, motivational orientation (ego vs. task), and the sport psychological profile in a sample of football players. A total of 328 young players aged between 14 and 18 years (M= 15.85; SD= 1.44) participated in this research. Data was collected using the Psychological Inventory of Sport Execution, the Empowering and Disempowering Climate Questionnaire, and the Task and Ego Orientation in Sport Questionnaire. The results obtained in this study through structural equation analysis showed significant and positive relationships between empowering climate and task orientation, as well as between disempowering climate and ego orientation. Similarly, positive and significant relationships were found between task orientation and the athlete's psychological skills. Moreover, there were positive and indirect relationships between an empowering climate and the athlete's psychological variables. These results suggest the importance of promoting appropriate motivational climates, as well as directing the athlete's motivation towards learning goals to foster the development of psychological skills on young players.

Keywords: Performance; motivation; football; psychology; youth.

Resumen

Las habilidades psicológicas de los atletas determinan su rendimiento. Sin embargo, su desarrollo requiere un proceso de aprendizaje, influenciado por el entorno del atleta. El objetivo del estudio fue analizar las relaciones entre el clima *empowering* y *disempowering*, la orientación motivacional (ego vs. tarea) y el perfil psicológico deportivo en jóvenes futbolistas. Participaron un total de 328 jugadores entre 14 y 18 años (M= 15.85; SD= 1.44). Los datos se recopilaron utilizando el Inventario Psicológico de Ejecución Deportiva, el Cuestionario de Clima *Empowering* y *Disempowering* y el Cuestionario de Orientación al Ego y a la Tarea en el Deporte. Los resultados obtenidos mediante ecuaciones estructurales mostraron relaciones significativas y positivas entre el clima *empowering* y la orientación a la tarea, así como entre el clima *disempowering* y la orientación al ego. También se encontraron relaciones positivas y significativas entre la orientación a la tarea y las habilidades psicológicas del atleta. Además, hubo relaciones positivas e indirectas entre un clima *empowering* y las variables psicológicas del deportista. Estos resultados sugieren la importancia de promover climas motivacionales adecuados, así como de orientar la motivación del deportista hacia objetivos de aprendizaje para desarrollar estas habilidades psicológicas.

Palabras clave: Rendimiento; motivación; fútbol; psicología; jóvenes.

Introduction

Motivation is a psychological concept with broad interest in the sports field (Birr et al., 2023; Clancy et al., 2016; Moreno-Luque et al., 2019; Tušak et al., 2022). Previous literature associate motivation positively with different factors such as the development of sports talent (Gledhill et al., 2017) and well-being (Duda, 2013), and negatively with variables such as burnout (Woods et al., 2022) or dropout (Schlesinger et al., 2018). A sportsman's motivation can influence their affective, cognitive, and behavioral behavior, depending on both intra-individual and situational aspects, with influential figures such as coaches playing a significant role (Duda & Appleton, 2016; Mossman et al., 2022). The actions and comments of these influential individuals can affect the athlete or the team by fostering different types of motivational climates, which, in turn, will impact performance in training and competitions (Balaguer et al., 2021; Duda, 2001). The latest research from Spanish-speaking countries shows that the way teams are motivated and supported affects how they feel, how much they want to play, and how well they perform in sports like handball and football (González-García et al., 2021; Valdivia-Moral et al., 2022).

Within the conceptualization of motivation, two contemporary theories prevail (Tušak et al., 2022): the Achievement Goal Theory (Ames, 1992; Nicholls, 1989) and the Self-Determination Theory (Deci et al., 1985; Ryan & Deci, 2017). On one hand, the Achievement Goal Theory focuses on the concept of competence and seeks to describe how athletes perceive success. Accordingly, there are two ways to define success: ego-involved (striving to be the best, placing greater importance on rivalry and being more skilled than others) and task-involved (seeking personal improvement, fostering collaboration and camaraderie, as personal goals are pursued without external comparisons) (Balaguer et al., 2021; Duda & Nicholls, 1992). On the other hand, the Self-Determination Theory posits that an athlete's motivation can lie on a continuum ranging from amotivation to intrinsic motivation, depending on the satisfaction of the athlete's basic psychological needs (autonomy, competence, and social relations) (Balaguer et al., 2021; Deci & Ryan, 1987; Mars et al., 2017). Recent research indicates that for young athletes, fulfilling their fundamental psychological needs is closely linked to positive behaviors like determination and pleasure in sports (Ortega-Toro et al., 2020).

In the past decade, Duda (2013) integrated both motivational perspectives in his empowering-disempowering climate model, thereby unifying these theories. This model comprehends the motivational climate as multidimensional and hierarchical, where the climate can be more or less empowering or disempowering depending on the developed psychological characteristics. In this context, when an athlete feels autonomous, supported socially, and their competence is fulfilled and task-involved, an empowering climate is developed. However, if the athlete's psychological needs are not met or if competence is perceived as ego-involved, the motivational climate becomes disempowering (Duda & Appleton, 2016). In this theoretical framework, the coach plays a crucial role as their actions can influence athletes' perception of the environment and subsequently affect their behavioral responses (Duda, 2013; Duda & Appleton, 2016). Therefore, the coach can adopt a style that supports autonomy, associated with an empowering climate, or a controlling style, associated with a disempowering climate (Duda, 2013).

Nonetheless, the climate generated by influential individuals is not the sole factor that influences motivation, as the athlete, in turn, exhibits a specific dispositional goal orientation, tending to perceive competition as ego-involved, task-involved, or both to varying degrees (Balaguer et al., 2021; Duda, 1993; Nicholls, 1989). Thus, when an athlete views competition as an opportunity to improve their own ability, they are more task-oriented, whereas if they believe that competition is about being better than others, they are more ego-involved (Balaguer et al., 2021; Whitehead & Duda, 1998). Considering the context and the athlete's internal variables, the empowering climate would be positively associated with task orientation, whereas the disempowering climate would be associated with ego orientation (Ruiz et al., 2021). In the sports domain, the disempowering climate has been linked to the intention to abandon in football players (Appleton & Duda, 2016; Castillo-Jiménez et al., 2022), while the empowering climate is associated with well-being (Duda, 2013) and

variables involved in performance. Recent research involving young handball players in Spain has confirmed this, showing that negative environments linked to more anxiety and lower performance levels (Martínez-Gallego et al., 2021).

Performance is present in athletes from an early age. Although it is influenced by technical-tactical and physical skills, the psychological aspect of the athlete is also considered an increasingly significant factor (Álvarez et al., 2014; Mahamud et al., 2005; Moreno-Fernández et al., 2019; Olmedilla et al., 2018). Loehr (1990) defined seven psychological skills that influence sports performance, including: (1) self-confidence (SC; certainty about attributions of success in a particular task), (2) negative coping control (NCC; the athlete's mastery and strategies when facing adverse situations), (3) attentional control (AC; mastery over alertness when performing an action), (4) visuo-imaginal control (VIC; mastery over internal sensory-perceptual variables), (5) motivational level (ML; the level of processes that activate, guide, direct, and sustain behavior), (6) positive coping control (PCC; the athlete's mastery and strategies when facing favorable situations), and (7) attitudinal control (ATC; the control a person has over their disposition to act and how they classify the objects, people, and behaviors around them) (Hernández-Mendo, 2006). New research indicates that these mental abilities are closely associated with achieving success in football and similar team sports (Zagalaz-Sánchez et al., 2021).

Specifically in football, various research studies have indicated the importance of motivational climates in various variables associated with psychological profile and sports performance. In this regard, when the climate fostered by coaches is task-involved, it has been linked to high levels of self-confidence and low levels of competitive anxiety, while the opposite is true when the motivational climate is ego-involved (Monteiro et al., 2018; Morales-Sánchez et al., 2022). Other studies (Danielsen et al., 2017; Kristjánsdóttir et al., 2019) have found associations between mental strength and improved performance. Conversely, Pettersen et al. (2023) found a negative relationship between mental strength and performance, only establishing positive relationships between performance and mastery motivational climates and extraversion. As evident, these results are not yet fully unified in the scientific literature, highlighting the importance of further research into the relationship between motivational climates and athletes' psychological profile to establish greater evidence in these variables.

Therefore, the aim of this study was to explore the relationship between empowering and disempowering climate, motivational orientation (ego vs. task), and the sports psychological profile in a sample of football players. The hypothesized model is shown in figure 1, which indicates the positive or negative value of the relationships expected to be found: (a) The empowering climate would be positively related to task orientation and, in turn, positively associated with the variables of the sports psychological profile (self-confidence, negative control coping, attentional control, visuo-imaginative control, motivational level, positive control coping, and attitude control); (b) The disempowering climate would be positively related to ego orientation and, in turn, negatively associated with the variables of the sports psychological profile.

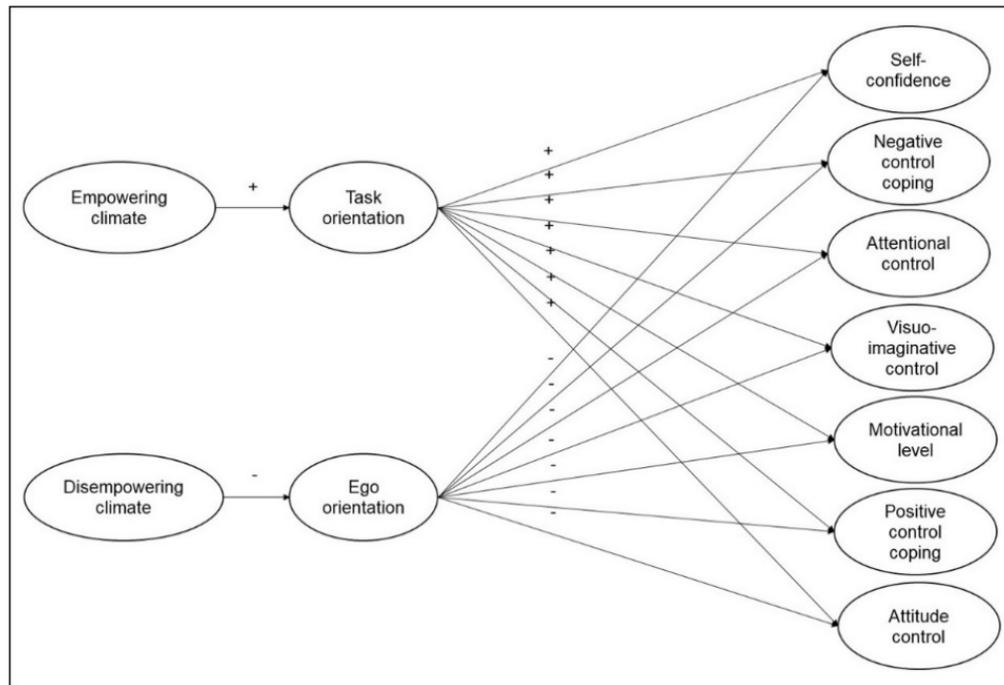


Figure 1. Hipotetized model

Materials and Methods

An associative and explanatory design was used, using structural equations to test the relationships between the variables.

Participants

In this research, a total of 328 young male footballers aged between 14 and 18 years ($M= 15.85$; $SD= 1.44$) participated. The athletes were part of different football teams in the province of Málaga (Spain). They participated in regional and national sports leagues, practicing three to four days a week for approximately 90 minutes each session. Inclusion criteria for the study required participants to be registered with one of the sports entities involved in the study and to belong to the cadet or junior category. Exclusion criteria included not being registered and not belonging to the cadet or junior category.

Instruments

Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C) (Appleton et al., 2016): This questionnaire assesses the perception of the motivational climate created by the coach in a sports context. It consists of 34 items grouped into two dimensions: empowering climate and disempowering climate. The empowering climate comprises 17 items associated with 3 factors: Task Involvement, Autonomy Support, and Social Support. The disempowering climate consists of 17 items grouped into 2 factors: Ego Involvement and Controlling Style. Respondents answer this questionnaire using a 5-point Likert scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree." The internal consistency for this study, assessed with Cronbach's Alpha, was as follows: Task Involvement ($\alpha= .87$), Autonomy Support ($\alpha= .75$), Social Support ($\alpha= .71$), Ego Involvement ($\alpha= .80$), and Controlling Style ($\alpha= .70$).

Ego and Task Orientation Questionnaire (TEOSQ) (Duda and Nicholls, 1992): This questionnaire evaluates the motivational orientation (Balaguer et al., 1996). It consists of a 13-item questionnaire designed to assess task (seven items) and ego (six items) orientations. Participants were asked to think about when they felt most successful in a particular sport and then indicate their agreement with items that reflected a task orientation (e.g. "I feel successful in sport when I work really hard") or ego orientation (e.g. "I feel successful in sport when the others can't do as well as me"). Responses were

collected using a five-point Likert-type scale, ranging from strongly disagree (one) to strongly agree (five). Internal consistency analyses (Cronbach's alpha) provided values of .82 for the task orientation factor, and .84 for ego orientation.

Psychological Inventory of Sports Performance (IPED) (Hernández-Mendo, 2006; Hernández-Mendo et al., 2014): This questionnaire is the Spanish adaptation of the Psychological Performance Inventory (PPI) (Loehr, 1990) and is used to assess the psychological profile of athletes. It consists of 42 items, grouped into seven dimensions: self-confidence, negative coping control, attentional control, visuo-imaginal control, motivational level, positive coping control, and attitudinal control. This questionnaire is answered using a Likert scale ranging from 1 "Almost Never" to 5 "Almost Always." The internal consistency for this study, evaluated with Cronbach's Alpha, was as follows: Self-Confidence ($\alpha = .71$), Negative Coping Control ($\alpha = .69$), Attentional Control ($\alpha = .73$), Visuo-Imaginal Control ($\alpha = .70$), Motivational Level ($\alpha = .74$), Positive Coping Control ($\alpha = .78$), and Attitudinal Control ($\alpha = .77$).

Procedure

The sample was selected from various youth football teams in the province of Málaga (Spain). The sampling method employed was non-probabilistic and convenience-based. To capture the sample, the research team initially contacted the management of the teams to present the research project and obtain their approval. Subsequently, a meeting was held with the club coaches to explain the objectives of the study, and informed consent was obtained from the players and their guardians, in the case of minors. Throughout the process, the guidelines of the Declaration of Helsinki (World Medical Association, 2013) were strictly adhered to, and the study received approval from the Ethics Committee of the University of Málaga (CEUMA 24–2023-H). The questionnaires were completed at the sports club facilities using electronic devices through the Google Forms platform. The research team was present during the data collection process to address any potential concerns, and approximately 30 minutes were allocated to complete the questionnaires.

Data analysis

Descriptive and inferential analyses were conducted. Mean scores, standard deviations, skewness, and kurtosis were obtained. Bivariate correlations for all study variables were also calculated. To test the hypothesized model, a two-step maximum likelihood approach (Kline, 2016) was conducted using IBM SPSS Amos v.27. Prior to this, confirmatory factor analysis (CFA) was performed to assess the psychometric properties of the model. Additionally, Composite Reliability (CR) (Raykov, 1997) was calculated to evaluate internal consistency, with a cutoff value of .70 considered appropriate (Hair et al., 2019). Convergent validity was assessed using the average variance extracted (AVE) (Hair et al., 2019), with a value above .50 deemed acceptable. Similarly, discriminant validity was considered adequate when the squared correlation coefficients were lower than AVE (Fornell and Larcker, 1981). Subsequently, structural equation modeling (SEM) was conducted to verify the relationships established in the hypothesized model. Standardized direct and indirect effects of the model were evaluated at a 95% confidence level, considering the effect significant when the Confidence Interval (CI) did not include zero among its values (Williams and MacKinnon, 2008). Bootstrap resampling, considering a bias-corrected 95% CI, was used to assess the significance of the direct and indirect effects. For CFA and SEM, the following absolute and incremental indices were used for analysis: Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standard Root Mean Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA) with its Confidence Interval (CI: 90%). Scores of CFI and TLI ≥ 0.90 , and SRMR and RMSEA ≤ 0.8 were considered acceptable (Byrne, 2016; Hair et al., 2019; Marsh et al., 2004).

Results

Preliminary Analysis

Full Information Robust Maximum Likelihood (FIML) was used to handle the small amount of missing data at the item level (missing at random = 2%) (Enders, 2022). Descriptive and correlation analyses were then performed. Table 1 displays the descriptive statistics, CR coefficients, average variance extracted, and latent correlations. The Skewness values (ranging from -.79 to .35) and kurtosis values (ranging from -.64 to .45) were within acceptable ranges (between -2 to +2 and -7 to +7, respectively), indicating no significant deviation from univariate normality (Hair et al., 2019). However, the Mardia's coefficient of multivariate kurtosis exceeded 5.0 in all cases. Therefore, Bollen-Stine bootstrap on 2000 samples was used for the subsequent analyses (Nevitt and Hancock, 2001).

Furthermore, CR coefficients demonstrated good internal consistency with values exceeding .70. Likewise, the values of average variance extracted (AVE) were also adequate, with values above or very close to .50. Moreover, discriminant validity was also satisfactory, as the square of the correlations between variables in no case exceeded AVE in any of the instances. Regarding latent correlations, most of the variables exhibited statistically significant correlations.

Table 1: Descriptive statistics, composite reliability coefficients, average variance extracted, and latent correlations.

	<i>M</i>	<i>SD</i>	<i>CR</i>	<i>AVE</i>	1	2	3	4	5	6	7	8	9	10
1. Empowering climate	4.20	.64	.92	.49	-									
2. Disempowering climate	2.57	.67	.87	.52	-.42**	-								
3. Task orientation	4.29	.66	.88	.55	.52**	-.22**	-							
4. Ego orientation	2.92	.96	.82	.51	.08	.19**	.11*	-						
5. Self-confidence	4.01	.61	.72	.50	.36**	-.24**	.40**	.09	-					
6. Negative control coping	3.45	.60	.74	.52	.23**	-.33**	.26**	-.04	.48**	-				
7. Attentional control	3.48	.58	.77	.54	.13*	-.20**	.14*	-.06	.47**	.51**	-			
8. Visuo-Imaginative control	3.68	.71	.70	.49	.29**	-.09	.39**	.16**	.36**	.18**	.16**	-		
9. Motivational level	4.24	.57	.78	.52	.38**	-.21**	.49**	.04	.53**	.30**	.28**	.48**	-	
10. Positive control coping	4.09	.55	.82	.53	.38**	-.25**	.50**	-.04	.66**	.50**	.45**	.45**	.68**	-
11. Attitude control	3.93	.57	.81	.51	.34**	-.20**	.48**	.06	.68**	.53**	.51**	.45**	.59**	.69**

Notes: *M* = Mean; *SD* = Standard Deviation; *S* = Skewness; *K* = Kurtosis; *CR* = Composite Reliability coefficients; *AVE* = Average Variance Extracted; *AVE* = Average Variance Extracted.

* $p < 0.05$; ** $p < 0.01$.

Measurement and structural model

Thus, measurement and structural equations models were generated, including the factors empowering climate, disempowering climate, ego-orientation, task-orientation, self-confidence, negative control coping, attentional control, visuo-Imaginative control, motivational level, positive control coping and attitude control. All variables displayed an acceptable fit to the data for measurement model: $\chi^2(3773) = 6264.48$; $p < .001$; CFI = .90; TLI = .90; SRMR = .072; RMSEA = .045 90%CI [.043, .047]. Also, the structural model displayed an acceptable fit to the data: $\chi^2(3811) = 6825.29$; $p < .001$; CFI = .91; TLI = .90; SRMR = .063; RMSEA = .049 90%CI [.047, .051]. Therefore, direct and indirect effects were analyzed.

Overall, significant direct effects were found (table 2): (a) Empowering climate was positively associated with task orientation; (b) Disempowering climate was positively associated with ego orientation; (c) Task-orientation was positively associated with self-confidence, negative control coping, attentional control, visuo-Imaginative control, motivational level, positive control coping and attitude control; (d) Ego-orientation was negatively associated with attentional control.

Regarding indirect effects, several results emerged (table 3): (a) Empowering climate was positively associated with self-confidence, negative control coping, attentional control, visuo-Imaginative control, motivational level, positive control

coping and attitude control; (b) Disempowering climate was negatively associated with attentional control and positive control coping.

Table 2: Direct effect coefficients.

	<i>p</i>	β	SE	95% CI	
				LB	UB
Empowering climate → task orientation	.001	.54	.06	.44	.66
Disempowering climate → ego orientation	.006	.19	.07	.09	.30
Task orientation → Self-confidence	.001	.86	.04	.79	.92
Task orientation → Negative control coping	.001	.67	.07	.56	.77
Task orientation → Attentional control	.001	.62	.07	.51	.74
Task orientation → Visuo-Imaginative control	.001	.67	.04	.57	.75
Task orientation → Motivational level	.001	.87	.03	.82	.93
Task orientation → Positive control coping	.001	.89	.06	.83	.95
Task orientation → Attitudinal control	.001	.86	.04	.80	.92
Ego orientation → Self-confidence	> .05	-.09	.08	-.27	.07
Ego orientation → Negative control coping	> .05	-.20	.09	-.38	-.01
Ego orientation → Attentional control	.017	-.26	.07	-.44	-.09
Ego orientation → Visuo-Imaginative control	> .05	.09	.11	-.06	.23
Ego orientation → Motivational level	> .05	-.10	.09	-.23	.04
Ego orientation → Positive control coping	> .05	-.17	.10	-.33	-.02
Ego orientation → Attitudinal control	> .05	-.10	.08	-.26	-.06

Notes: β = standardized regression coefficient; SE = Standardized Error; CI95% = 95% Confidence Interval; LB = Lower Bound; UB = Upper Bound.

Table 3: Indirect effect coefficients.

	<i>p</i>	β	SE	95% CI	
				LB	UB
Empowering climate → Task orientation → Self-confidence	.001	.47	.05	.40	.55
Empowering climate → Task orientation → Negative control coping	< .001	.36	.05	.29	.46
Empowering climate → Task orientation → Attentional control	.001	.33	.04	.26	.42
Empowering climate → Task orientation → Visuo-Imaginative control	.001	.36	.06	.27	.45
Empowering climate → Task orientation → Motivational level	.001	.47	.06	.38	.57
Empowering climate → Task orientation → Positive control coping	.001	.54	.06	.43	.64
Empowering climate → Task orientation → Attitude control	.001	.53	.05	.44	.64
Disempowering climate → Ego orientation → Self-confidence	> .05	-.02	.02	-.06	.01
Disempowering climate → Ego orientation → Negative control coping	> .05	-.04	.03	-.10	.01
Disempowering climate → Ego orientation → Attentional control	.012	-.05	.03	-.11	-.02
Disempowering climate → Ego orientation → Visuo-Imaginative control	> .05	.02	.02	-.01	.06
Disempowering climate → Ego orientation → Motivational level	> .05	-.02	.02	-.06	.01
Disempowering climate → Ego orientation → Positive control coping	.030	-.03	.02	-.08	-.01
Disempowering climate → Ego orientation → Attitude control	> .05	-.02	.02	-.06	.01

Notes: β = standardized regression coefficient; SE = Standardized Error; CI95% = 95% Confidence Interval; LB = Lower Bound; UB = Upper Bound.

Discussion

The aim of this study was to explore the relationship between empowering and disempowering climate, motivational orientation (ego vs. task) and sport psychological profile in a young football players sample. The results partially fulfil this objective. In fact, although the structural equation model demonstrated statistically significant associations between empowering motivational climate, task motivational orientation, and sport psychological profile, as well as between disempowering motivational climate and ego orientation, it only exhibited statistically significant relationships between ego orientation and the sport psychological profile in attentional control.

Firstly, the structural equation analyses conducted in this study reveal significant direct and positive relationships between empowering climate and task orientation. This aligns with previous research and suggests that a climate fostered by the coach, based on autonomy support, centered on learning, and providing social support to athletes, would influence the orientation that athletes develop during sports practice (Duda & Appleton, 2016; Mossman et al., 2022). In this sense, the empowering climate would favor the individual improvement of the athlete, enhancing their sense of well-being and autonomy, avoiding comparison with other players, and reducing the sense of competition among them (Duda, 2013).

In this context, it is considered that the development of psychological skills for sports performance could be favored. As the data shows, task orientation was significantly associated with sport psychological skills, which is consistent with previous studies (Álvarez Solves et al., 2013; Duda and Balaguer, 2007; Reigal et al., 2018). The development of sport psychological skills requires a learning process, which could be enhanced by the athlete's tendency to focus their efforts on learning during training sessions (Vélez et al., 2017). Thus, it would be consistent that athletes with a task-centered orientation would dedicate more effort to improving not only their technical-tactical skills but also their psychological skills during training. Moreover, they would place more importance on these aspects, which would enhance their predisposition to improve their psychological skills (Nicholls, 1984; Kuczek, 2013).

Furthermore, further supporting the arguments justifying these relationships, the structural equation model also revealed indirect relationships between empowering climate and the psychological profile through the athlete's task-oriented motivation. This underscores the significance of cultivating task-oriented motivation through empowering climates (Ruiz et al., 2021), as it establishes a highly conducive environment for the development of psychological skills that determine sports performance (Gimeno et al., 2007; Palicio et al., 2022). This underscores the crucial role of coaches in fostering athletes' psychological profiles, as it highlights the impact that the coach's behavior in training and competition contexts has on athletes' learning (Danielsen et al., 2017; Kristjánsdóttir et al., 2019; Monteiro et al., 2018; Morales-Sánchez et al., 2022; Pettersen et al., 2023).

Secondly, the structural equation model revealed statistically significant associations between the disempowering climate and ego orientation. This is consistent with previous studies (Gürpınar and Yıldırım, 2023; Ruiz et al., 2021) and suggests that climates fostered by the coach that prioritize outcomes and competition among athletes, along with the use of a more controlling interaction style, would promote the development of a more ego-oriented motivation (Ruiz et al., 2021). Consequently, players would be more inclined to compare themselves with others and seek performance above all else, rather than promoting their development and evolution in learning (Ruiz et al., 2021). Regarding ego orientation, the structural equation model indicates the scarce presence of statistically significant associations with sport psychological skills. Possible - The athletes' age, experience, or competitive level might affect how much ego orientation affects their psychological skill development. - The athletes' age, experience, or competitive level might influence the extent to which ego orientation impacts their psychological skill development. Young or inexperienced athletes may not have ego-oriented goals that cause psychological problems yet, or their problems may depend on how they feel or what their coach does. (Lochbaum et al., 2021). This highlights that athletes who prioritize outcomes are less motivated by learning, considering ability and talent as fixed, thereby impacting the enhancement of their psychological skills involved in performance (Dweck and Leggett, 1988; Kuczek, 2013). This situation would hinder athletes' development, as it could signify a hindrance to

their progress. Only relationships with attentional control have been shown, but in a negative sense, suggesting that even an ego-oriented motivational orientation could affect the development of this psychological capacity (Reigal et al., 2018). In fact, in previous studies, ego orientation has been negatively associated with other psychological skills such as self-confidence (Monteiro et al., 2018; Morales-Sánchez et al., 2022). Additionally, in line with the existing literature, an ego-oriented motivational orientation would entail a greater focus on outcomes and comparison with others, potentially leading to maladaptive behaviors and increased stress, affecting their psychological abilities to cope with the demands of competition (Roberts et al., 2007).

This can also be observed in the indirect relationships between the disempowering climate and the sport psychological profile through the athlete's ego-oriented motivation, as it has been significantly and negatively associated with attentional control and positive coping control. Again, the data suggests that the disempowering climate, through increased ego-oriented motivation, could harm the athlete's psychological development, which would not contribute to the athlete's performance, as it would deprive them of improving certain aspects that could help them face the competition with greater assurance.

In fact, the coach's controlling style is based on fostering ego involvement, increasing in-group rivalry and comparison with others (Duda & Appleton, 2016), which could influence the enjoyment capacity and coping during favourable moments for their players. This could reassert what was previously suggested about the perception of competition and ego orientation proposed by Roberts et al. (2007). In this sense, it could be observed that a supportive autonomy style along with the athlete's task orientation would favor the development of psychological skills related to sports performance. Meanwhile, a controlling style, disempowering climate, and ego orientation could reduce positive coping control. This implies that the athlete who bases their competence on being better than others and who also perceives a climate that also motivates these types of attitudes might not feel secure when facing favorable situations, finding less control over them.

As limitations of the study, despite having a large sample size, it would be advisable to expand the number of participants to obtain results that are more representative of the population. On the other hand, for the analysis of the motivational climate, it could be considered that there are other potentially influential variables, such as family or the athletes' environment, which are not captured in the instruments used but could play an important role, especially considering the ages of the sample. Due to these limitations, it could be interesting to continue generating lines of research that seek to address these gaps. In this sense, it would be considered a valuable contribution to have a larger sample size and to carry out studies that add some intervention to obtain richer results. Additionally, it could be interesting to continue delving into other influential variables, such as adding the measurement of the motivational style of reference relatives or conducting a longer-term follow-up on the influential variables. Furthermore, the cross-sectional nature of the study design limits causal inferences. Therefore, the study's conclusions should be cautious considering this issue.

Conclusions

The results of this research showed significant and positive relationships between an empowering climate and task orientation, as well as between a disempowering climate and ego orientation. Positive and significant relationships were also found between task orientation and athletes' psychological skills. Likewise, positive and indirect relationships were observed between an empowering climate and athletes' psychological variables. These results suggest the importance of promoting appropriate motivational climates and directing athletes' motivation toward learning goals to foster the development of psychological skills in young players.

Practical applications

These results could be useful for professionals in the field of sports, including coaches, psychologists, athletes, managers, or even the reference individuals of the athletes, such as their family members or close circle. This would allow for an expansion of knowledge about motivational styles related to sport psychological skills. Moreover, it raises new questions that should be addressed and analyzed in future studies to improve the approach to motivational and psychosocial aspects in football. Specifically, it has been shown that empowering climates and their relationship with task-motivational orientations are not only important for athletes' well-being but also determine the acquisition of psychological resources that are involved in athletic performance. Thus, psychological training programming should not only be based on the program's internal structure but should also consider contextual elements that could influence training success.

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