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Asociaciones entre el clima empowering y disempowering, la orientación motivacional y la ansiedad competitiva en jóvenes futbolistas

Associations between empowering and disempowering climate, motivational orientation and competitive anxiety in young football players

Associações entre o clima empowering e disempowering, a orientação motivacional e a ansiedade competitiva em jovens futebolistas

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RESUMEN

El modelo de clima empowering-disempowering ha sido ampliamente utilizado para explicar las experiencias de los deportistas en contextos competitivos y de entrenamiento. Este marco sugiere que el entorno social creado por el entrenador puede influir en los procesos motivacionales y las respuestas psicológicas de los deportistas. El objetivo de esta investigación fue analizar la relación entre el clima empowering y disempowering, la orientación motivacional al ego y a la tarea, la ansiedad competitiva somática y cognitiva, y la autoconfianza en jóvenes futbolistas. Un total de 328 adolescentes varones, con edades comprendidas entre los 14 y 18 años ($M = 15.83$; $DT = 1.38$), participaron en esta investigación. Los datos se recopilaron utilizando el Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C), el Task and Ego Orientation in Sport Questionnaire (TEOSQ) y el Competitive State Anxiety Inventory-2 Revised (CSAI-2R). Se utilizó un modelo de ecuaciones estructurales para comprender los efectos directos e indirectos establecidos entre las diferentes variables. Los resultados mostraron relaciones positivas entre el clima empowering y la orientación a la tarea, entre el clima disempowering y la orientación al ego, y entre la orientación a la tarea y la autoconfianza, así como una relación negativa entre la orientación a la tarea y la ansiedad somática. Asimismo, se observaron relaciones negativas entre el clima empowering y la ansiedad somática y relaciones positivas con la autoconfianza a través de la orientación a la tarea. Específicamente, el modelo explicó el 20% de la varianza de la autoconfianza ($R^2 = .20$) y el 8% de la varianza de la ansiedad somática ($R^2 = .08$). Los resultados sugieren que el desarrollo de un clima empowering por parte de los entrenadores, junto con una orientación motivacional hacia la tarea de los deportistas, podría favorecer variables psicológicas asociadas al bienestar y al rendimiento deportivo, como una mayor autoconfianza y una menor ansiedad somática.

Palabras clave: Motivación, Ansiedad competitiva, Fútbol.

ABSTRACT

The empowering-disempowering climate model has been widely used to explain athletes' experiences in competitive and training contexts. This framework suggests that the social environment created by the coach can influence athletes' motivational processes and psychological responses. The aim of this research was to analyze the relationship between empowering and disempowering climate, ego and task motivational orientation, somatic and cognitive competitive anxiety, and self-confidence in young footballers. A total of 328 male adolescents, aged between 14 and 18 years ($M = 15.83$; $SD = 1.38$), participated in this research. Data were collected using the Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C), the Task and Ego Orientation in Sport Questionnaire (TEOSQ), and the Competitive State Anxiety Inventory-2 Revised (CSAI-2R). A structural equation model was used to understand the direct and indirect effects established between the different variables. The results showed positive relationships between empowering climate and task orientation, between disempowering climate and ego orientation, and between task orientation and self-confidence, as well as a negative relationship between task orientation and somatic anxiety. Likewise, negative relationships were observed between empowering climate and somatic anxiety and positive relationships with self-confidence through task orientation. Specifically, the model explained 20% of the variance in self-confidence ($R^2 = .20$) and 8% of the variance in somatic anxiety ($R^2 = .08$). The results suggest that the development of an empowering climate by coaches, together with a task-oriented motivational orientation among athletes, could promote psychological variables associated with athletes' well-being and sports performance, such as greater self-confidence and lower somatic anxiety.

Keywords: Motivation, Competitive anxiety, Football.

RESUMO

O modelo de clima empowering-disempowering tem sido amplamente utilizado para explicar as experiências dos atletas em contextos competitivos e de treino. Este referencial sugere que o ambiente social criado pelo treinador pode influenciar os processos motivacionais e as respostas psicológicas dos atletas. O objetivo desta investigação foi analisar a relação entre o clima empowering e disempowering, a orientação motivacional para o ego e para a tarefa, a ansiedade competitiva somática e cognitiva, e a autoconfiança em jovens futebolistas. Um total de 328 adolescentes do sexo masculino, com idades compreendidas entre os 14 e 18 anos ($M = 15.83$; $DP = 1.38$), participaram nesta investigação. Os dados foram recolhidos utilizando o Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C), o Task and Ego Orientation in Sport Questionnaire (TEOSQ) e o Competitive State Anxiety Inventory-2 Revised (CSAI-2R). Utilizou-se um modelo de equações estruturais para compreender os efeitos diretos e indiretos estabelecidos entre as diferentes variáveis. Os resultados mostraram relações positivas entre o clima empowering e a orientação para a tarefa, entre o clima disempowering e a orientação para o ego, e entre a orientação para a tarefa e a autoconfiança, bem como uma relação negativa entre a orientação para a tarefa e a ansiedade somática. Do mesmo modo, observaram-se relações negativas entre o clima empowering e a ansiedade somática e relações positivas com a autoconfiança através da orientação para a tarefa. Especificamente, o modelo explicou 20% da variância da autoconfiança ($R^2 = .20$) e 8% da variância da ansiedade somática ($R^2 = .08$). Os resultados sugerem que o desenvolvimento de um clima empowering por parte dos treinadores, juntamente com uma orientação motivacional para a tarefa dos atletas, poderia favorecer variáveis psicológicas associadas ao bem-estar e ao desempenho esportivo, como uma maior autoconfiança e uma menor ansiedade somática.

Palavras chave: Motivação, Ansiedade competitiva, Futebol.

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INTRODUCTION

Anxiety is characterized by feelings of apprehension, tension, worry, and fear in situations perceived as threatening and is the result of physiological reactions (somatic component), negative self-perception (cognitive component), and low self-confidence (Cheng et al., 2009; Ford et al., 2017). This often occurs in sports settings, especially during moments when athletes feel evaluated, such as in competition (Ford et al., 2017; Martens, Vealey, & Burton, 1990). In pre-competition situations, some studies have found high profiles of self-confidence, somatic anxiety, and cognitive anxiety in tennis players (Rodríguez Cayetano et al., 2017), handball players (Ortín Montero et al., 2013), and male football players (Arroyo del Bosque et al., 2022), which can influence performance, technical-tactical skills, and athletes' well-being (Gruda & Ojo, 2023). Furthermore, anxiety levels can be affected by contextual variables such as prior practice, outcome, or athlete's attitude (Gruda & Ojo, 2023; Selmi et al., 2018). In this regard, a study found higher levels of cognitive anxiety and lower self-confidence in post-competition evaluation when the final result is defeat (Arroyo del Bosque et al., 2022).

However, the perception of the outcome achieved and the satisfaction derived from it are subjective and are related to the athlete's concept of success, which is associated with the type of motivation perceived. An athlete's motivation significantly influences their emotional, cognitive, and behavioural responses and is shaped by both internal and external factors, including intrapersonal and situational aspects (Duda & Appleton, 2016; Mossman et al., 2022; Perez Garcia et al., 2025). Within contextual factors, the actions and comments of significant others influence the motivational climate, affecting performance in both training and competition (Balaguer et al., 2021; Duda, 2001). Two contemporary theories are considered central to the study of motivation (Tušák et al., 2022): Achievement Goal Theory (Ames, 1992; Nicholls, 1984) and Self-Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2017).

On one hand, the Achievement Goal Theory delves into competition, seeking to understand how athletes perceive success: (1) from an ego standpoint, where they strive to be the best, emphasizing rivalry and surpassing others in skill, or (2) from a task standpoint, where they aim to improve personally, promoting collaboration and camaraderie by pursuing individual goals without comparing themselves to others (Balaguer et al., 2021; Duda & Nicholls, 1992). On the other hand, Self-Determination Theory suggests that an athlete's motivation ranges from lack of motivation to intrinsic motivation, depending on how well the athlete's fundamental psychological needs such as autonomy, competence, and social relationships are met (Balaguer et al., 2021; Deci & Ryan, 1987; Mars et al., 2017). Duda (2013) integrated these motivational theories into his empowering-disempowering climate model. This approach views motivational climate as multidimensional and hierarchical, identifying two types: empowering, when athletes experience autonomy, social support, and satisfaction in task-related competition, and disempowering, when these needs are not met or competition is perceived from a selfish perspective (Duda & Appleton, 2016).

In this context, the role of the coach is crucial, as their actions can influence how athletes perceive the environment and, consequently, their behavioral responses (Duda, 2013; Duda & Appleton, 2016). The coach can adopt an autonomy-supportive style, associated with an empowering climate, or a controlling style, linked to a disempowering climate (Duda, 2013). Additionally, motivation depends not only on the climate but also on the athlete's dispositional orientation towards competition as task or ego-oriented (Balaguer et al., 2021; Duda, 1993; Nicholls, 1989). In the sports context, it has been observed that a disempowering climate is related to intention to drop out among football players, while an empowering climate is linked to well-being and variables associated with performance (Duda, 2013; Appleton & Duda, 2016; Castillo Jiménez et al., 2022; Martínez-González et al., 2025; Reyes-Bossio et al., 2026).

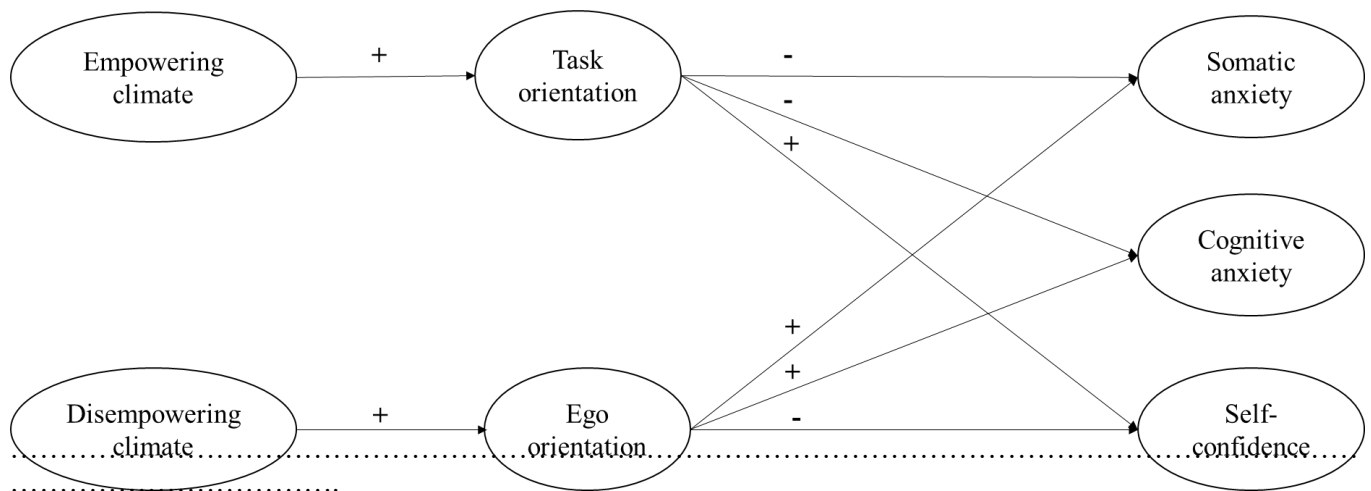
Some studies have shown the relationship between motivation and anxiety in sports. For example, one study evaluated 136 young athletes and found that despite no association between an ego-oriented approach and anxiety, athletes with a strong task-oriented goal orientation and a high perception of sporting competence tend to experience lower levels of cognitive and somatic anxiety during competitions (Ommundsen & Pedersen, 1999). Another study (Pineda Espejel et al., 2021) suggested that autonomous motivation is associated with more adaptive outcomes regarding precompetitive anxiety because it implies personal will. Conversely, the absence of motivation

increases physiological arousal, uncertainty, and worry before a competition, leading to anxiety. Additionally, Pluhar et al. (2019) found that team sports players were more likely to engage in sports for fun rather than goal-oriented objectives, resulting in lower levels of anxiety compared to individual sports players. However, further research is still needed in this area to clarify the relationship between empowering climate, motivational orientation, and different components of precompetitive anxiety.

Therefore, the aim of this study was to explore the relationship between empowering and disempowering climates, motivational orientation (ego vs. task), and competitive anxiety in a sample of football players. Based on the theoretical framework and previous evidence, the following hypotheses were proposed: (H1) empowering climate would be positively associated with task orientation; (H2) disempowering climate would be positively associated with ego orientation; (H3) task orientation would be negatively associated with competitive anxiety and positively associated with self-confidence; and (H4) ego orientation would be positively associated with competitive anxiety and negatively associated with self-confidence. Furthermore, task and ego orientations were expected to mediate the relationships between motivational climate and competitive anxiety and self-confidence (H5). The hypothesized model is depicted in Figure 1, indicating the expected positive or negative value of the relationships. This study would provide a better understanding of the relationship between these concepts and aims to encourage professionals in the field to pay attention to the generated climate and improve their intervention strategies.

Figure 1

Hypothesized model.



METHODS

Research design

In this research, an associative and explanatory design was used, in which a structural equation model was tested (Ato et al., 2013). This design was considered appropriate because the study aimed to examine the associations between empowering and disempowering motivational climates, motivational orientations, competitive anxiety, and self-confidence, as well as to analyse the direct and indirect relationships among these variables.

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Participants

A total of 328 male adolescents, aged between 14 and 18 years ($M = 15.83$; $SD = 1.38$), participated in this research. All of them were part of different youth football teams in the province of Málaga, participating in regional and national sports leagues, and training three to four days a week for approximately 90 minutes each session. Participants were recruited using non-probabilistic convenience sampling, based on the accessibility and willingness of the clubs and players to participate in the study. This sampling strategy facilitated access to young football players who met the characteristics required for the research objectives. Exclusion criteria were as follows: (a) Having irregular attendance to training sessions, less than 90%; (b) Having been injured for periods longer than two weeks in the two months prior to data collection; (c) Having recently joined the team and having less than six months of experience in the current team. The aim of establishing these exclusion criteria was to avoid potential biases arising from the team adaptation processes.

Instruments

Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C). This questionnaire evaluates the perception of the motivational climate established by the coach in a sports context. It comprises 34 items grouped into two dimensions: empowering climate and disempowering climate. The empowering climate consists of 17 items (e.g., "My coach encourages players to try new skills"), while the disempowering climate comprises 17 items (e.g., "My coach has his favourite players"). Respondents rate 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: Empowering Climate ($\alpha = .92$) and Disempowering Climate ($\alpha = .84$).

Ego and Task Orientation Questionnaire (TEOSQ) (Duda & Nicholls, 1992). The Spanish version adapted for Physical Education of this questionnaire was utilized to gauge students' motivational orientation (Balaguer et al., 1996). It comprises a 13-item questionnaire designed to assess task orientation (seven items) and ego orientation (six items). Participants were instructed to think about when they felt most successful in a particular sport and then indicate their level of agreement with items reflecting task-oriented (e.g., "I feel successful in sport when I work really hard") or ego-oriented (e.g., "I feel successful in sport when others can't do as well as me") tendencies. 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) yielded values of .81 for the task orientation factor and .87 for ego orientation.

Competitive State Anxiety Inventory-2 Revised (CSAI-2R) (Cox et al., 2003). This questionnaire is a revision of the Competitive State Anxiety Inventory-2 (CSAI-2) by Martens, Burton et al. (1990), which assesses competitive state anxiety. Consisting of 17 items, it is structured into three factors: Cognitive Anxiety, Somatic Anxiety, and Self-Confidence. Respondents rate this instrument on a Likert-type scale ranging from 1 (not at all) to 4 (very much). The internal consistency analyses (Cronbach's Alpha) yielded values of .72 for the Cognitive Anxiety factor, .78 for Somatic Anxiety, and .82 for Self-Confidence.

Procedure

The sample was selected from various youth football teams in the province of Málaga. To recruit the sample, initial contact was made with the team's management to introduce the research project and obtain their approval. Subsequently, a meeting was held with the coaches of the clubs to explain the study's objectives and request permission to collect data from their players. Informed consent was obtained from the players and their parents or legal guardians if they were minors. They were informed that participation was voluntary, anonymous, and the data would be used exclusively for scientific purposes. Moreover, they were informed that they could withdraw their consent at any time. The guidelines of the Declaration of Helsinki (World Medical Association, 2013) were strictly followed, as well as the ethical standards for sport and exercise science research (Harriss et al., 2019). Data collection, processing, and storage were conducted in accordance with Spanish Organic Law 3/2018, of 5

December, on the Protection of Personal Data and Guarantee of Digital Rights. Approval was obtained from the Ethics Committee of the University of Málaga.

The questionnaires were completed in the months of April and May of the 2022/2023 season. They were conducted at the clubs' facilities using electronic devices, as the questionnaires were implemented on Google Forms. A researcher was present during questionnaire completion to address any potential queries, and approximately 30 minutes were allocated for completion. Prior instructions were provided on how to answer the questions, and any doubts were resolved. There were no issues encountered, and the data collection proceeded smoothly. The complete questionnaire used for data collection is available from the corresponding author upon reasonable request.

Data Analysis

Descriptive and inferential analyses were conducted, obtaining mean scores, standard deviations, skewness, and kurtosis. Bivariate correlations were also calculated for all study variables. To test the hypothesized model, a two-step maximum likelihood approach (Kline, 2016) was performed using IBM SPSS Amos v.27. Prior to this, confirmatory factor analysis (CFA) was conducted to assess the psychometric properties of the model. Additionally, to evaluate internal consistency, Composite Reliability (CR) (Raykov, 1997) was calculated, with a cutoff point of .70 considered appropriate (Hair et al., 2019). Convergent validity was estimated using average variance extracted (AVE) (Hair et al., 2019), with a value above .50 considered adequate. Furthermore, discriminant validity was deemed adequate when squared correlation coefficients were lower than AVE (Fornell & Larcker, 1981). Subsequently, structural equation modeling (SEM) was conducted to examine the relationships established in the hypothesized model. Standardized direct and indirect effects of the model were evaluated at a 95% confidence level, considering significance when the Confidence Interval (CI) did not include zero (Williams & MacKinnon, 2008). Additionally, Bootstrap resampling with a bias-corrected 95% CI was used to assess the significance of 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 a Confidence Interval (CI: 90%). Scores of CFI and TLI ≥ 0.90 , and SRMR and RMSEA ≤ 0.08 were considered acceptable (Byrne, 2016; Hair et al., 2019; Marsh et al., 2004).

Mediation Analysis

As a complementary analysis to the SEM, simple mediation analyses were conducted to further examine the specific indirect effects identified in the structural model. This complementary approach allowed the mediation pathways to be examined individually and their indirect effects to be estimated using bootstrap confidence intervals. Simple mediation analysis was performed to examine the relationships between the variables (Hayes, 2018) using SPSS PROCESS v.3.5 (model 4, with one mediator). Model 4 permits controlling the indirect effects of the mediator while controlling for all variables included in the model, allowing for independent analysis of the mediator effects and providing regression coefficients for the causal steps of the specified indirect effects. Bootstrap resampling with 5000 samples was utilized (Hayes, 2018; Williams & MacKinnon, 2008).

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 conducted. Table 1 displays the descriptive statistics, CR coefficients, average variance extracted, and latent correlations. Skewness and kurtosis values were within acceptable ranges (between -2 to +2 and -7 to +7, respectively), indicating no deviations from univariate normality (Hair et al., 2019). However, Mardia's coefficient of

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multivariate kurtosis exceeded 5.0 in all cases. Therefore, Bollen-Stine bootstrap on 2000 samples was employed for subsequent analyses (Nevitt & Hancock, 2001).

Furthermore, CR coefficients demonstrated good internal consistency with values greater than .70. Likewise, the values of Average Variance Extracted (AVE) were also adequate, with values above .50, except for empowering climate with a value of .49. Although slightly below the recommended .50 threshold, this value is very close to the criterion and, together with the high composite reliability observed for this factor (CR = .92), suggests acceptable convergent validity. Furthermore, all factor loadings were statistically significant, providing additional support for the convergent validity of the measurement model. Additionally, discriminant validity was satisfactory, as the square of the correlations between variables in no case exceeded AVE. Regarding latent correlations, most of the variables showed statistically significant correlations.

Table 1

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

Variables	M	SD	S	K	CR	AVE	1	2	3	4	5	6
1. Empowering Climate	4.20	.64	-.61	-.51	.92	.49	-					
2. Disempowering Climate	2.57	.67	.35	.18	.87	.52	-.42**	-				
3. Task Orientation	4.29	.66	-.79	-.31	.88	.55	.52**	-.22**	-			
4. Ego Orientation	2.92	.96	.05	-.64	.82	.51	.08	.19**	.11*	-		
5. Somatic Anxiety	1.80	.53	.65	-.18	.77	.50	-.16**	.28**	-.22**	.06	-	
6. Cognitive Anxiety	2.93	.66	-.20	-.85	.78	.51	.02	.16*	-.01	.01	.37**	-
7. Self-Confidence	3.36	.58	-.79	.05	.83	.62	.41**	-.26**	.36**	.12*	-.24**	-.25**

Notes. M = Mean; SD = Standard Deviation; S = Skewness; K = Kurtosis; CR = Composite Reliability coefficients; AVE = Average Variance Extracted. * $p < 0.05$; ** $p < 0.01$.

Measurement and Structural Model

Thus, measurement models and structural equations were developed. The analysis of both the measurement and structural models included the factors of empowering climate, disempowering climate, ego-orientation, task-orientation, cognitive anxiety, somatic anxiety, and self-confidence. All variables exhibited an acceptable fit to the data for the measurement model: $\chi^2(1954) = 2706.949$; $p < .001$; CFI = .90; TLI = .90; SRMR = .061; RMSEA = .035 90%CI [.031, .038]. Furthermore, the structural model also demonstrated an acceptable fit to the data: $\chi^2(1959) = 2701.648$; $p < .001$; CFI = .90; TLI = .90; SRMR = .068; RMSEA = .034 90%CI [.031, .037]. Therefore, direct and indirect effects were examined.

Overall, significant direct effects were identified (see Table 2; Figure 1): (a) Empowering climate exhibited a positive association with task orientation; (b) Disempowering climate showed a positive association with ego orientation; (c) Task-orientation displayed a positive association with self-confidence and a negative association with somatic anxiety.

Regarding indirect effects, several findings emerged (see Table 2): (a) Empowering climate exhibited a positive association with self-confidence through task orientation; (b) Empowering climate showed a negative association with somatic anxiety through task orientation.

Table 2

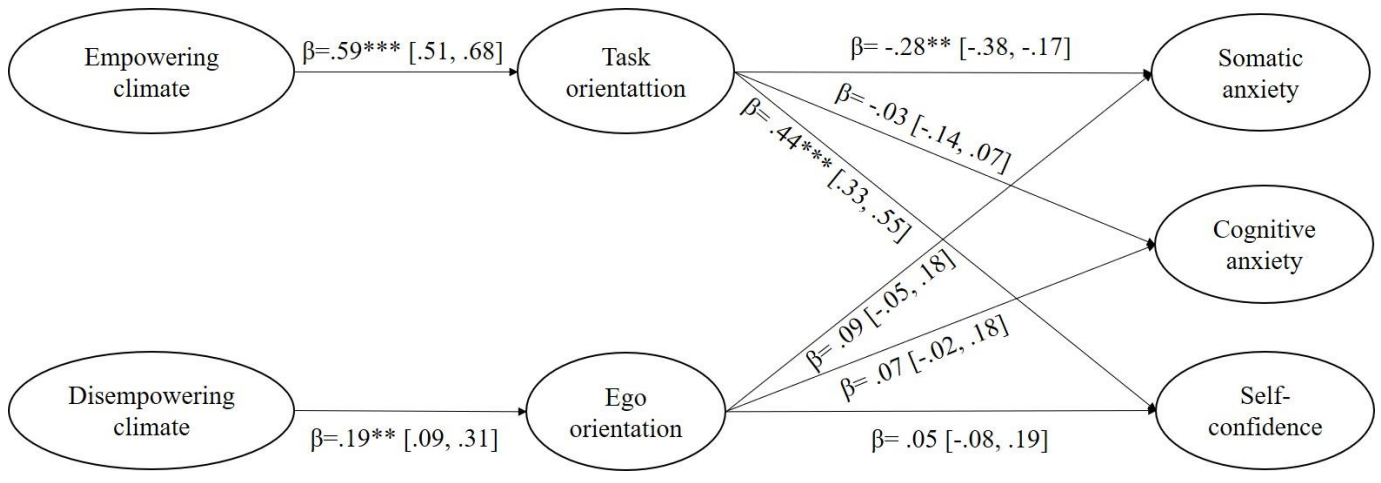
Direct and indirect effect coefficients.

	<i>p</i>	β	SE	95%CI	
				LB	BU
Direct effects					
Empowering climate → task orientation	.001	.59	.05	.51	.68
Disempowering climate → ego orientation	.002	.19	.07	.09	.31
Task orientation → Somatic anxiety	.001	-.28	.06	-.38	-.17
Task orientation → Cognitive anxiety	> .05	-.03	.07	-.14	.07
Task orientation → Self-confidence	.001	.44	.07	.33	.55
Ego orientation → Somatic anxiety	> .05	.09	.08	-.05	.18
Ego orientation → Cognitive anxiety	> .05	.07	.06	-.02	.18
Ego orientation → Self-confidence	> .05	.05	.07	-.08	.19
Indirect effects					
Empowering climate → task orientation → Somatic anxiety	.001	-.17	.04	-.24	-.10
Empowering climate → task orientation → Cognitive anxiety	> .05	-.02	.05	-.08	.04
Empowering climate → task orientation → Self-confidence	< .001	.26	.04	.19	.36
Disempowering climate → ego orientation → Somatic anxiety	> .05	.01	.02	-.01	.05
Disempowering climate → ego orientation → Cognitive anxiety	> .05	.01	.02	-.01	.05
Disempowering climate → ego orientation → Self-confidence	> .05	.02	.01	.00	.04

Notes. B = standardized regression coefficient; SE = Standardized Error; 95%CI = 95% Confidence Interval; LB = Lower Bound; UB = Upper Bound.

Figure 2

Direct effect coefficients (structural model)



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Mediation Analysis

A simple mediation of task-oriented motivation in the association between empowering climate with self-confidence and somatic anxiety is illustrated in Figures 3 and 4. Results from Figure 3 indicated a significant indirect effect of empowering climate on self-confidence through task-oriented motivation, while the direct effect remained statistically significant, indicating partial mediation. Conversely, Figure 4 showed a significant indirect effect of empowering climate on somatic anxiety through task-oriented motivation, whereas the direct effect was not statistically significant, indicating total mediation.

Figure 3

Simple mediation of task-oriented motivation in the relationship between empowering climate and self-confidence.

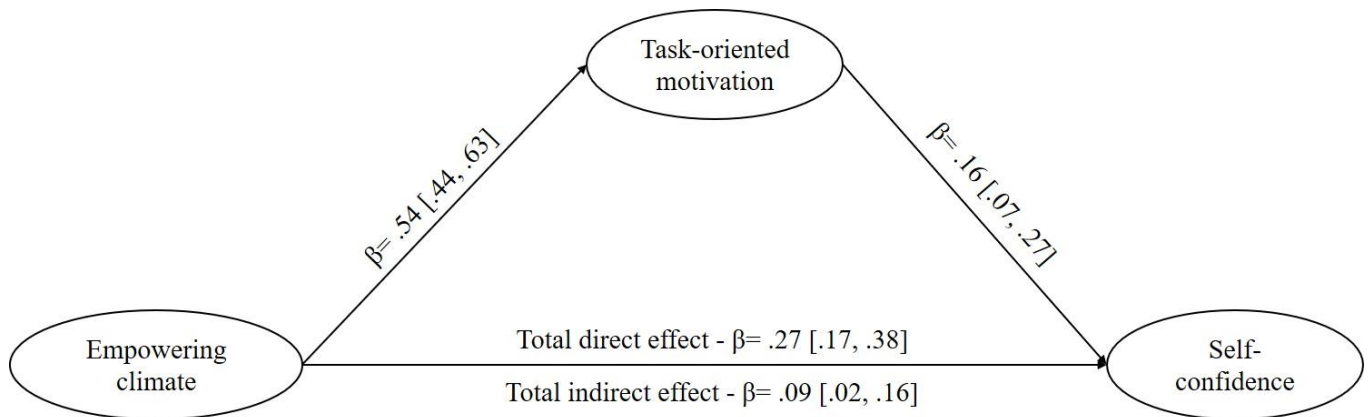
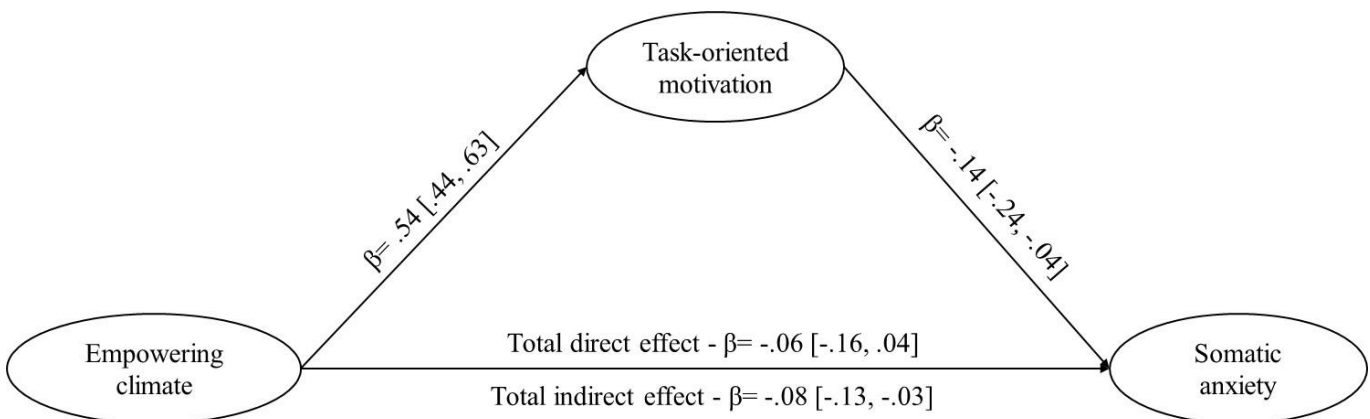


Figure 4

Simple mediation of task-oriented motivation in the relationship between empowering climate and somatic-anxiety



DISCUSSION

The purpose of this study was to analyze the relationship between empowering and disempowering climate, motivational orientation (ego vs. task), competitive anxiety, and self-confidence in a sample of young footballers. To achieve this, a structural equation model was employed to explore the relationships within the hypothesized model and thus evaluate the direct and indirect effects established among the mentioned variables.

Firstly, the results revealed direct effects among some of the analyzed variables. Specifically, empowering climate was positively and statistically associated with task-oriented motivational orientation. Conversely, disempowering climate was positively associated with ego-oriented motivational orientation. These findings are consistent with previous research and the theory underpinning the empowering and disempowering climate model. It is posited that an empowering climate in the sporting context fosters an environment focused on learning, where coach instructions promote athlete autonomy, and socio-emotional support is provided to the athlete (Duda, 2013). On the other hand, a disempowering climate is characterized by a less flexible and more directive style, where the focus is more on outcomes, thus fostering a more competitive environment. Hence, the positive relationships with motivational orientation more closely linked to ego are coherent (Duda & Balaguer, 2007).

Similarly, task-oriented motivational orientation has been associated with lower somatic anxiety and higher self-confidence. This aligns with previous studies where task orientation has been linked to greater well-being in athletes, promoting adherence and the development of psychological skills (Balaguer et al., 2021; Castro Sánchez et al., 2018; Ommundsen & Pedersen, 1999). It is suggested that task orientation could help in developing more effective coping strategies, implementing more adaptive cognitive and emotional responses in these environments (Ivarsson et al., 2020; Mouloud & Elkader, 2016), which could be influencing the negative relationship with somatic anxiety and positive relationship with self-confidence. We expected to find statistically significant and positive relationships between ego orientation and competitive anxiety, as well as negative relationships with self-confidence, based on previous findings in various studies (Balaguer et al., 2021; Castro Sánchez et al., 2018; Ivarsson et al., 2020; Pineda Espejel et al., 2021). However, these relationships were not statistically significant in the present study. One possible explanation is that the association between ego orientation and competitive anxiety may depend on other personal or contextual factors that were not considered in the present model. For example, athletes may differ in the psychological resources and coping strategies they use to manage competitive demands, which could attenuate the expected association between ego orientation and anxiety. It might be necessary to analyze in future studies what psychological tools these athletes have to cope with the stress of competition, as it is possible to find athletes who, despite showing an ego-oriented motivational orientation, do not manifest confidence or competitive anxiety problems due to other psychological tools that would mitigate the effects of more hostile and stressful environments.

Secondly, positive indirect effects have been observed between empowering climate and self-confidence, as well as negative indirect effects between empowering climate and somatic anxiety. It has been noted that the effect generated by task-oriented motivation is significant in both cases, although it is more relevant in the relationships between empowering climate and somatic anxiety, as the mediating effect of task-oriented motivation is crucial for establishing a relationship between them. Nonetheless, the data suggest that the empowering climate fostered by coaches promotes, as a preliminary step, a change in the way athletes orient their sports participation, increasing their orientation towards learning. In this way, the likelihood of experiencing greater well-being during sports practice is increased, fostering positive perceptions in these environments and enhancing their coping with competitive stress (Balaguer et al., 2021; Ivarsson et al., 2020; Mouloud & Elkader, 2016).

Based on the principles established by the empowering and disempowering climate model, empowering motivational climates provide environmental elements conducive to optimal experiences. In these situations, coaches encourage more reflection and learning, provide more assistance to athletes, treat everyone more equitably and closely (Duda, 2013; Duda & Appleton, 2016; Duda & Balaguer, 2007). Therefore, it is easier for athletes to develop a more favourable tendency towards personal progress, without focusing on comparisons with others, and prioritising the group's well-being. Consequently, athletes are more likely to develop motivation aligned with these

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factors, which have been shown to be clearly associated with increased confidence and reduced competitive anxiety (Castro Sánchez et al., 2018; Ivarsson et al., 2020; Pineda Espejel et al., 2021).

One limitation of this study is that the sample consisted exclusively of male adolescent football players. Therefore, the generalizability of the findings to female athletes, other age groups, competitive levels, and other sports should be considered with caution. Future studies should include more heterogeneous samples, including female athletes, to examine whether the relationships observed in the present study are replicated across different sporting populations and contexts. Despite having a considerable sample size, expanding the number of participants could further enrich the study's findings. Additionally, it would be interesting to examine potential differences according to age and other sociodemographic or sporting characteristics. Furthermore, it would be appropriate to include additional variables that could significantly influence athletes, such as family environment or sociocultural context, as well as psychological variables that could explain the relationships between the studied dimensions. Specifically, it would be highly interesting to analyze what other factors may be impacting the relationships between ego orientation and self-confidence or competitive anxiety. Finally, the AVE value for empowering climate (.49) was slightly below the recommended .50 threshold. Although this value was very close to the recommended criterion and the factor showed high composite reliability ($CR = .92$), this finding should be considered when interpreting the results involving empowering climate and constitutes a limitation of the measurement model. Future studies should further examine the convergent validity of this construct in similar samples.

In any case, the results obtained in this research reinforce the postulates of previous studies indicating that an empowering climate generated by the coach is linked to a higher likelihood of increasing the well-being of their athletes (Duda & Appleton, 2016; Birr et al., 2023). However, the results suggest that this effect occurs as a consequence of an increase in task-oriented motivational orientation, which is necessary to consider to assess the real impact of interactions between the coach and the athletes. Likewise, these data highlight the importance of coaches in creating suitable environments for sports practice and increasing optimal experiences for athletes.

PRACTICAL APPLICATIONS

The research findings have direct and significant implications for the various stakeholders involved in football, such as coaches, sport psychologists, and sports directors. In this regard, translating this knowledge into daily practice requires implementing strategies focused on optimizing the sporting environment. Firstly, it is essential for sports clubs and institutions to promote specific training programs aimed at coaches, with the goal of instructing them in the development and maintenance of empowering motivational climates. This training should equip coaches to provide greater socio-emotional support, foster player autonomy in decision-making, and ensure equitable treatment for all team members. For example, coaches could offer players choices between different training tasks or involve them in setting individual improvement goals. They could also provide feedback focused on effort, learning, and personal progress rather than primarily comparing performance between teammates. Simultaneously, it is necessary to raise awareness about the importance of reducing the use of directive, rigid, or authoritarian styles, which are characteristic of disempowering environments.

Regarding the design of training sessions and competition, the results suggest that coaches should structure tasks by focusing on effort, personal improvement, and technical-tactical learning. Deliberately promoting a task-oriented motivational orientation facilitates the reduction of somatic anxiety and increases self-confidence among young footballers. Furthermore, from the perspective of sport psychology, there is a clear need for preventive interventions. Given that the competitive football environment often induces an ego orientation, the role of the sport psychologist is crucial in equipping athletes with effective stress-coping strategies. Psychological skills training, such as emotional regulation and cognitive restructuring, will allow players to manage competitive anxiety and preserve their self-confidence, even when operating in highly demanding sports contexts or those strictly focused on short-term outcomes.

Ultimately, the findings highlight the relevant role that coaches may play in promoting psychological variables associated with young footballers' well-being. Consequently, institutional investment in the pedagogical and

psychological education of coaching staff may contribute to creating more adaptive motivational environments and fostering positive psychological experiences during athletes' formative stages.

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The authors report that there are no conflicts of interest to declare.

Data availability statement

Data are available upon request to authors.

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