Empowering and disempowering climate generated by coaches is associated with negative coping control and attentional control in football players: the mediating rol of self-confidence and competitive anxiety.

Abstract

The relationship between motivational climate and psychological sporting abilities could be influenced by levels of competitive anxiety and self-confidence. The purpose of this research was to explore the relationships between empowering and disempowering motivational climates with negative coping control and attentional control, analyzing whether there was an effect of self-confidence and competitive anxiety on these relationships. A total of 328 male adolescents, aged between 14 and 18 years (M= 15.85; SD= 1.44), participated in this research. To collect the information, the Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C), the Inventario Psicológico de Ejecución Deportiva (IPED), and the Revised Competitive State Anxiety Inventory-2 (CSAI-2R) were used. The structural equation model revealed positive and statistically significant associations between empowering motivational climate and self-confidence, between disempowering climate and competitive anxiety, as well as between self-confidence and psychological sporting abilities (negative coping control and attentional control). On the other hand, the analyses highlighted negative relationships between competitive anxiety and negative coping control, as well as attentional control. Furthermore, the model revealed indirect associations between empowering climate and negative coping control, and attentional control through self-confidence, as well as between disempowering climate and negative coping control, and attentional control through competitive anxiety. This information could be valuable for professionals in the field of sports, including coaches, psychologists, athletes, managers, or even individuals close to the athletes such as family members or mentors.

Keywords: Motivational climate, football, self-confidence, competitive anxiety, psychological skills.

Introduction

The study of motivation is of great interest for Sports Psychology, especially for its involvement in the successful behavior of athletes. Therefore, the scientific literature shows multiple investigations that deal with it.[1–5] Previous research establishes a positive association between motivation and other psychological variables related with sport performance and well-being,[6,7,8] and a negative association with variables such as the perception of burnout[9] or sports dropout.[10] The athlete's motivation influences their affective, cognitive, and behavioural behaviour, and depends on intra-individual and situational factors that constantly interact with each other,[11] with significant roles played by reference persons such as coaches or relatives.[12, 13, 14]

Specifically, the motivational climate refers to the atmosphere created by significant social agents, which is perceived and interpreted by individuals participating in that context.[15] Specifically, coaches are significant figures in constructing the motivational climate within the sports environment, as their behaviour fosters the development of specific motivational climates.[16, 17] Therefore, interactions between coaches and athletes are essential in the development of the athlete's motivation, making it especially necessary to analyse the climate generated by the coach in these contexts.

There are various motivational theories that have attempted to explain the construction of motivational climates in sports.[18] One of them is Self-Determination Theory,[19, 20] which posits that athletes' motivation lies on a continuum from lack of motivation to intrinsic motivation, and this depends on the satisfaction of the basic psychological needs (autonomy, competence, and social relationships).[16, 21, 22, 23] The other theory is Achievement Goal Theory.[15, 24] This theory describes how athletes

conceive success, focusing on the concept of competence. Thus, there are two ways to explain success: task-oriented (focuses on individual improvement through collaboration and camaraderie, avoiding external comparisons) and ego-oriented (focuses on being better than others, giving more importance to rivalry and external comparisons).[16, 25, 26]

Duda[27] developed a conceptualization based on these two approaches and elaborated a multidimensional and hierarchical model that differentiated between empowering and disempowering climates. On the one hand, a disempowering climate is characterized by ego orientation and a controlling style, where coaches show a lack of support for their athletes, constant criticism, negative comparisons, and an excessive focus on errors throughout training and matches.[28, 29, 30] This can be observed when a coach is not paying attention to his athletes, trying to understand what is happening to them and how to help them. He is usually a very rigid coach, with an inflexible communication style and using unkind words. Thus, disempowering climates create an environment where athletes are more likely to fail to meet their psychological needs and increase their frustration if outcome goals are not achieved.[12] These climates generate an atmosphere of insecurity, fear of failure, and anxiety in athletes. Lack of self-confidence in themselves and their environment hinders their performance and enjoyment of sports.[31]

On the other hand, an empowering climate is characterized by high task involvement, high autonomy support, and social support, and is one where coaches promote the development of athletes' skills, offer socioemotional support, and facilitate personal development.[28, 30] This can be seen when a coach is kind and tries to understand how the athlete feels at all times, using kind words and gestures when speaking to the athletes. Therefore, athletes who are in an empowering climate, athletes would be better prepared for the development of their psychological sporting skills, as they are in a more

favourable environment to focus on sporting and personal improvement.[32, 33, 34] Thus, creating an empowering climate is considered essential to optimize the sports experience, promote performance, and the psychological well-being of athletes.[31, 35, 36]

For the reasons described above, these types of motivational climates would be related to the development of psychological outcomes such us self-confidence and competitive anxiety in athletes.[37] Thus, it is considered that coaches who promote an empowering motivational climate will generate greater confidence in athletes and less competitive anxiety.[31, 32, 33] Particularly, competitive anxiety and self-confidence are two extensively studied variables in football, so it is worth analyzing in which contexts they develop most intensely.[38 – 41]

First, competitive anxiety is a negative emotional reaction to the stress of competition, divided into somatic (physiological aspect) and cognitive (mental aspect) components.[42, 43] The somatic symptoms of anxiety are reflected in physiological imbalances such as increased heart rate and physical manifestations such as stomach pain. Cognitive symptoms refer to negative thoughts about sports participation or about the athlete's own ability. Second, self-confidence is the athlete's belief in their own resources to achieve optimal performance.[44] Both variables are important because of their ability to enhance adaptation to training and competition and facilitate a better sports experience.[45, 46] It seems logical to think that in those environments in which the coach offers greater social support to athletes, reduces the stress of achieving a good result and enhances the athletes' learning, the possibilities of increasing confidence and reducing anxiety will be greater. [28-34]

Likewise, if athletes participate in environments that increase their confidence and reduce competitive anxiety, they will develop their psychological abilities linked to sports

performance in a more effective way. There are different psychological variables that can affect the performance of athletes, which have been established in recent years.[47,48] Specifically, two extensively explored psychological skills considered important in the sports context are negative coping control and attentional control.[47, 48, 49] Negative coping control refers to the mastery over the cognitive and behavioral activities that the athlete initiates to cope with adverse situations. Thus, when the athlete encounters unfavorable situations, because he is losing or because he has some disadvantage, he must use strategies that allow him to recover or function in the best possible way. On the other hand, attentional control refers to the degree of mastery exerted over a state of alertness or readiness for action.[50] This management is essential for the athlete to behave optimally, which must function properly throughout the time in which the athlete is developing the task.

Both variables are considered important as they contribute to the decision-making process during sports practice, allowing athletes to maintain calmness and concentration to achieve better sports performance.[51, 52, 53] This would allow them to perform technical sports gestures more effectively, apply the trained movements in unfavorable situations and increase the chances of functioning better even if there is a high level of stress. Additionally, low levels of negative coping control and attentional control are considered risk factors for sports injuries, since the tension and adequate concentration to perform the trained technical gestures could be lost and because the stress caused by sporting situations would affect the athlete more.[54]

Indeed, there are studies linking empowering climates or similar constructs with the development of psychological sporting skills.[55, 56] Furthermore, other research has highlighted the relationship between anxiety and self-confidence in athletes with the

development of their psychological skills to cope with competition, specifically negative coping control and attentional control.[57, 58, 59] However, there is no research that analyses the mediating effect that the development of competitive anxiety or self-confidence has, based on the motivational climate created by the coach, on the psychological skills that the athlete requires to perform better in their discipline. From our point of view, this has occurred because these are investigations that have revealed only part of these relationships. In our opinion, greater confidence and less competitive anxiety allows athletes to focus better on the task and increase the effectiveness of the psychological strategies applied in training. Thus, those contextual aspects that favour self-confidence and security, which will have a positive impact on the construction of your sports psychological profile. This is why we consider that empowering climates will favor the development of sports psychological skills, but because confidence in their abilities is previously increased and the perception of stress and anxiety decreases when facing training and competition.

Therefore, given the implications of empowering climates,[28, 33] it is considered that promoting this type of environment would facilitate the development of athletes' psychological sporting skills. However, these skills could in turn be determined by the relationships between the empowering climate itself and the increase in self-confidence or the reduction of competitive anxiety in athletes. To our knowledge, there are no previous studies that have analysed the potential effects of self-confidence and competitive anxiety on the relationships between empowering and disempowering climates with psychological performance skills. Thus, the purpose of this research was to explore the relationships between empowering and disempowering motivational climates with negative coping control and attentional control, analyzing whether there was an effect of self-confidence and competitive anxiety on these relationships. Since there are

no similar previous models, we wanted to test a series of relationships in this research. Thus, based on previous literature, we consider that the empowering climate will be positively associated with negative coping control and attentional control through increased self-confidence. For its part, we consider that the disempowering climate will be negatively associated with negative coping control and attentional control through an increase in somatic and cognitive competitive anxiety.

The hypothetical model to be tested in this research will be as follows (Figure 1):

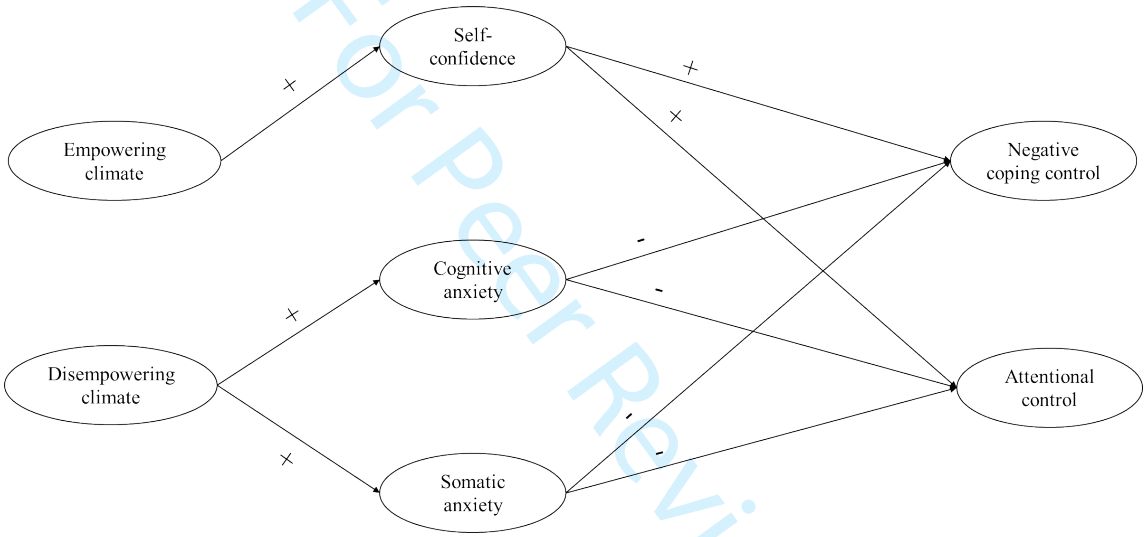

Figure 1. Hypothesized model.

Methods

Participants

A total of 328 male adolescents, aged between 14 and 18 years (M= 15.85; SD= 1.44), participated in this research. They were from Spanish origin, and they had been playing soccer for 9.74 years (SD= 3.60). They were all members of different youth football teams in the province of Malaga, Spain, which competed in regional and national sports leagues, and trained three to four days a week for approximately 90 minutes each session. Exclusion criteria were: (a) Irregular attendance to training, 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 resulting from adaptation processes to the team.

Instruments

Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C).[60] 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 from 1 "Strongly Disagree" to 5 "Strongly Agree." The internal consistency (Cronbach's Alpha) was: Task Involvement (α= .87), Autonomy Support (α= .75), Social Support (α= .71), Ego Involvement (α= .80), and Controlling Style (α= .70).

Revised Competitive State Anxiety Inventory-2 (CSAI-2R).[61] This questionnaire is a revision of the Competitive State Anxiety Inventory-2 (CSAI-2) by Martens, Burton et al.[62] and is used to assess competitive anxiety. It consists of 17 items, which are grouped into three dimensions: Cognitive anxiety, Somatic anxiety, and Self-confidence. A Likert scale from 1 "Not at all" to 4 "Very much" is used to respond to this questionnaire. The internal consistency, assessed with Cronbach's Alpha, was: Cognitive anxiety (α= .72), Somatic anxiety (α= .78), and Self-confidence (α= .82).

Psychological Inventory of Sports Execution (IPED).[50, 63] This questionnaire is the Spanish adaptation of the *Psychological Performance Inventory* (PPI) by Loehr[64, 65] and is used to evaluate the psychological profile of the athlete. It is composed of 42 items, which are grouped into seven dimensions. Self-confidence, Negative coping control, Attentional control, Visuo-imaginative control, Motivational level, Positive coping control and Attitudinal control. A Likert scale ranging from 1 "Almost never" to 5 "Almost always" is used to answer this questionnaire. For this research, only two of these factors were evaluated: Negative coping control and Attentional control, The internal consistency for this study (Cronbach's Alpha) was: Negative Coping Control (α= .69), Attentional Control (α= .73).

Procedure

The sample was selected from different youth football teams from Malaga, Spain. Non-probabilistic convenience sampling was used. To recruit the sample, the research project was initially presented to the team management to obtain their approval. Subsequently, a meeting was held with the club coaches to explain the objective of this study and request permission to collect data from their players. Informed consent was gotten from the players and their parents or guardians. They were informed that participation was anonymous and voluntary, and data would be used for scientific purposes. Additionally, they were informed that they could withdraw their consent at any time. The guidelines of the Declaration of Helsinki[66] were followed, and approval was obtained from the Ethics Committee of the University of Malaga (Spain) (CEUMA 24-2023-H).

The questionnaires were completed at the club facilities using electronic devices, as the questionnaires were implemented in Google Forms. Someone was present during the completion of the questionnaires to address any possible doubts, and approximately

30 minutes were allotted to complete them. Instructions were provided beforehand on how to answer the questions, and any potential doubts were resolved. There were no issues, and the data collection proceeded smoothly.

Data analysis

Mean scores, standard deviations, skewness, and kurtosis were obtained. Correlations were also calculated for all study variables. A two-step maximum likelihood approach[67] was used in IBM SPSS Amos v.27 to check the hypothesized model. Previously, a confirmatory factor analysis (CFA) was carried out to evaluate the properties of the model. In addition, Composite Reliability (CR)[68] was calculated to evaluate internal consistency (cut-off level = .70).[69] On the other hand, convergent validity was evaluated using the Average Variance Extract (AVE),[69] considering a value greater than .50 appropriate. Likewise, discriminant validity was considered adequate if the squared correlation coefficients were lower than the AVE.[70] Subsequently, structural equation modeling (SEM) was conducted to verify the relationships between measurements in the model. Standardized effects of the model (direct and indirect) were analysed, with a confidence level of 95%, considering an effect significant when the Confidence Interval (CI) did not include zero.[71] Additionally, Bootstrap resampling (95% CI) was used to evaluate the significance of the effects. For CFA and SEM, these indexes were calculated: 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 $\geq$ 0.90, SRMR and RMSEA $\leq$ 0.08 were considered acceptable.[69, 72, 73]

Mediation Analysis

Multiple parallel mediation analysis was performed to determine the associations between the factors[74] using SPSS PROCESS v.3.5 (model 4, with two parallel mediators). Model 4 allows for controlling the indirect effects of each mediator while controlling for all variables included in the model, enabling independent analysis of the mediator effects. Bootstrap resampling with 5000 samples was used.[71, 74]

Results

Preliminary Analysis

Full Information Robust Maximum Likelihood (FIML) was used to handle the missing data at the item level (missing at random = 2%).[75] Subsequently, descriptive and correlation analyses were conducted. Table 1 shows the descriptive statistics, CR coefficients, average variance extracted, and latent correlations. Skewness and kurtosis values were within acceptable ranges (between -.79 to .65 and -.85 to .47, respectively), indicating no significant departure from univariate normality.[69] However, the Mardia's coefficient of multivariate kurtosis was higher than 5.0 in all cases. Therefore, Bollen-Stine bootstrap on 2000 samples was used for subsequent analyses.[76]

Also, CR coefficients showed good internal consistency with values greater than .70. Additionally, the average variance extracted (AVE) values were also adequate, with values above .50, except for empowering climate with a value of .49. Furthermore, discriminant validity was also adequate, as the square of the correlations between variables was never greater than AVE in any case. Besides, most of the factors 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. Cognitive anxiety	2.93	.66	-.20	-.85	.78	.51	-.02	.16**	-			
4. Somatic anxiety	1.80	.53	.65	-.18	.77	.50	-.17**	.28**	.37**	-		
5. Self-confidence	3.36	.58	-.79	.05	.83	.62	.41**	-.26**	-.25**	-.24**	-	
6. Negative coping control	3.45	.60	.07	-.32	.74	.52	.23**	-.33**	-.44**	-.48**	.45**	-
7. Attentional control	3.48	.58	-.39	.47	.77	.54	.13*	-.20**	-.36**	-.35**	.42**	.51**

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 models and structural equations were generated. The analysis of the measurement model included the factors empowering and disempowering climate, self-confidence, cognitive and somatic precompetitive anxiety, negative control coping, and attentional control. This model displayed an acceptable fit to the data: $\chi 2$ (1932) = 3172.95; p< .001; CFI= .90; TLI= .90; SRMR= .062; RMSEA= .044 90%CI [.042, .047]. Also, the structural model displayed an acceptable fit to the data: $\chi 2$ (1943) = 3291.45; p< .001; CFI= .91; TLI= .90; SRMR= .071; RMSEA= .046 90%CI [.043, .049].

Direct and indirect effects

Significant direct effects were showed (table 3; figure 1): (a) empowering climate was positively related with self-confidence; (b) disempowering climate was positively related with cognitive and somatic anxiety; (c) self-confidence was positively associated with negative coping control and attentional control; (d) cognitive and somatic anxiety were

negatively associated with negative control coping and attentional control.

Regarding indirect effects (table 3): (a) empowering climate had a positive and indirect effect on negative coping control and attentional control; (b) disempowering climate had a negative and indirect effect on negative control coping and attentional control.

Table 2. Direct and indirect effect coefficients.

				95%CI	
	p	**β**	**SE**	**LB**	**BU**
Direct effects					
Empowering climate → self-confidence	.001	.46	.06	.36	.55
Disempowering climate → cognitive anxiety	.002	.22	.06	.12	.33
Disempowering climate → somatic anxiety	.001	.29	.07	.17	.39
Self-confidence → Negative coping control	.001	.52	.08	.39	.65
Self-confidence → Attentional control	.001	.52	.09	.36	.65
Cognitive anxiety → Negative coping control	.001	-.61	.12	-.79	-.41
Cognitive anxiety → Attentional control	.001	-.45	.11	-.64	-.27
Somatic anxiety → Negative coping control	.001	-.42	.14	-.64	-.20
Somatic anxiety → Attentional control	.007	-.32	.12	-.53	-.13
Indirect effects					
Empowering climate → self-confidence → Negative coping control	< .001	.23	.04	.17	.31
Empowering climate → self-confidence → Attentional control	.001	.23	.05	.16	.32
Disempowering climate → (C/S) Anxiety → Negative coping control	.001	-.26	.06	-.36	-.16
Disempowering climate → (C/S) Anxiety → Attentional control	.001	-.19	.05	-.29	-.11

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

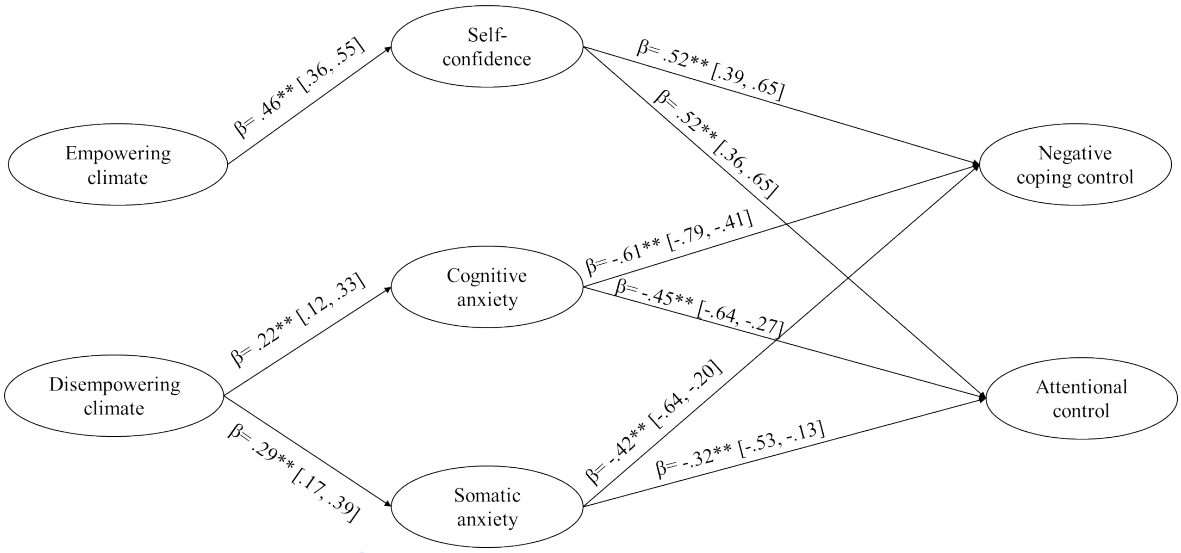

Figure 2. Direct effect coefficients (structural model).

Mediation Analysis

A parallel mediation of cognitive anxiety and somatic anxiety in the association between disempowering climate with negative control coping and attentional are presented in figures 3 and 4. Results from figure 3 showed a partial mediation, since the indirect effect is lower than direct effect. In turn, figure 4 exhibited a total mediation, because the indirect effect is higher than direct effect, and direct effect is not significant. In both cases, cognitive and somatic anxiety have a significant and negative association with negative control coping, but the indirect effect from somatic anxiety is higher.

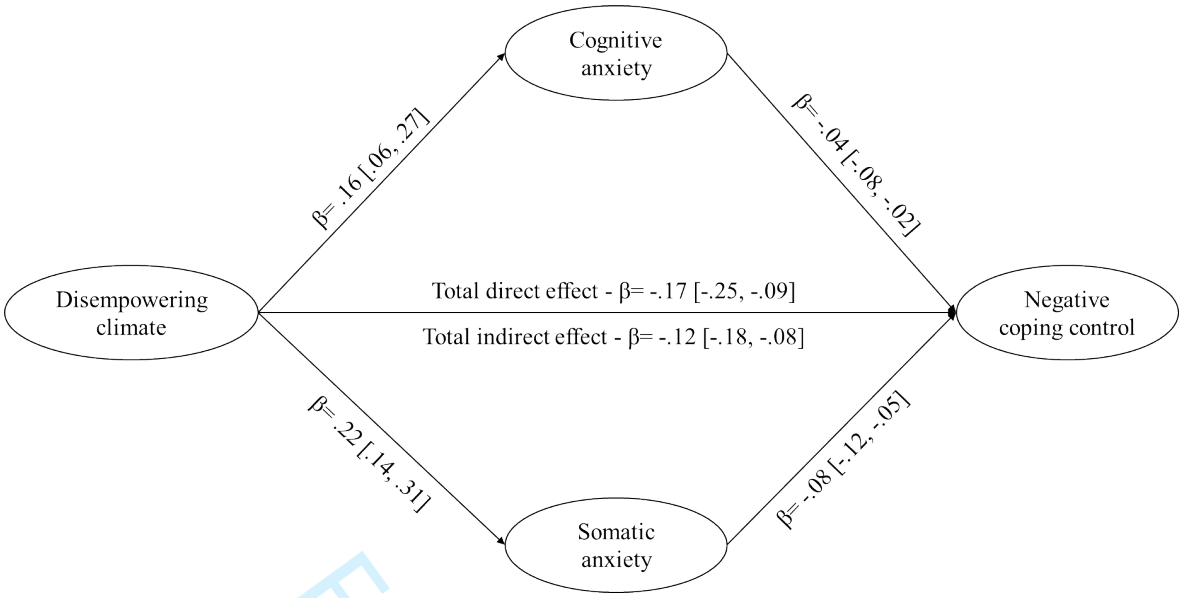

Figure 3. Parallel mediation of cognitive anxiety and somatic anxiety in the interaction between disempowering climate and negative coping control.

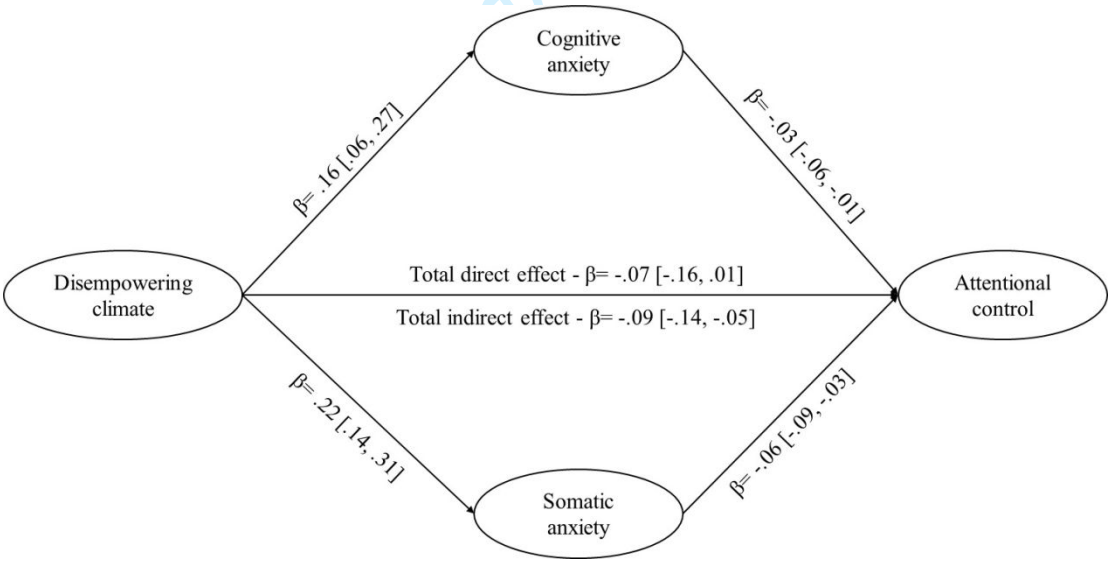

Figure 4. Parallel mediation of cognitive anxiety and somatic anxiety in the interaction between disempowering climate and attentional control.

Discussion

The objectives of the research were to explore the associations between empowering and disempowering motivational climates with negative coping control and attentional

control, analyzing if there was an effect of self-confidence and competitive anxiety on these relationships. The structural equation model showed positive and statistically significant associations between empowering motivational climate and self-confidence, between disempowering climate and competitive anxiety, as well as between self-confidence and sport psychological skills (negative coping control and attentional control). Furthermore, the analyses highlighted negative relationships between competitive anxiety with negative coping control and attentional control. On the other hand, the model showed indirect associations between empowering climate and negative coping control and attentional control through self-confidence, as well as between disempowering climate and negative coping control and attentional control through competitive anxiety.

Firstly, the structural equation analyses conducted in this study reveal significant, direct, and positive relationships between empowering climate and self-confidence. This is consistent with previous studies[41, 77] and suggests that a climate where the coach supports autonomy, focuses on learning, and provides social support will positively influence athletes' self-confidence and enjoyment. In this sense, the empowering climate would be facilitating athletes' perception that they can effectively cope with the demands of competition.[78] This suggests that athletes would have greater peace of mind learning and would not be so worried about the coach's reaction to possible errors. This is crucial for the athlete, who must face high-stress contexts. Empowering climates have recently been implemented and are offering an excellent explanation of motivational and adherence processes in sporting contexts. In this case, they are revealing their relationship with a process that is crucial for sports engagement, such as the perception of self-confidence. As has been observed in previous studies, this self-evaluation is built in

relation to the social context and causes a better experience in challenging sporting situations. [31-33, 38, 39]

Likewise, the model revealed that self-confidence is significantly, directly, and positively related to sport psychological skills, including negative coping control and attentional control, which aligns with previous research.[79, 80, 81] These results indicate that athletes who perceive themselves as having the necessary resources can maintain attention and coping more effectively with adverse competition situations compared to athletes with lower self-confidence.[82] This suggests that greater self-confidence in the athlete would increase the psychological resources available to face sporting challenges, reducing the mental block that could cause situations with high levels of nervousness and lack of confidence. Specifically, as has been observed in previous studies, the perception of self-confidence increases security in the athlete's learning processes. The acquisition of psychological skills in sport requires a process in which the athlete perceives that these types of aspects are relevant and has enough peace of mind to try to achieve them. [44-46.]

Secondly, the structural equation model provided significant, direct, and positive relationships between disempowering climate and competitive anxiety. This result is consistent with previous studies[1, 35] and would indicate that climates created by the coach, characterized by a more controlling interaction style and where emphasis is placed on outcomes and competition among athletes, would favour the emergence of fear of failure by the athlete, leading to an anxious state.[83] Competitive anxiety arises as a consequence of facing high demands and perceiving that one does not have the resources to face them. The data obtained suggest that athletes immersed in a disempowering climate could consider that they have less support from the coach in the face of a bad result or a negative performance. Furthermore, in these environments, athletes would participate in a climate that is less conducive to learning, which would result in less development of strategies to

cope with competitive stress. Thus, this type of ego-oriented motivational climate would facilitate the occurrence of higher anxiety states, influencing athletes' sporting experience.[84] This suggests that in these environments, the athlete would be very focused on not failing, evaluating each action and comparing their result with that of other teammates. Furthermore, in situations of failure it would be likely that the athlete would analyse the situation in a non-constructive way.

On the other hand, as the data show, competitive anxiety was significantly and directly associated negatively with sport psychological skills, including negative coping control and attentional control. These results align with previous research where elevated levels of anxiety in athletes would hinder the development of sport psychological skills such as attentional control and negative coping control.[82, 85, 86] In these situations, high levels of stress would reduce the possibility of implementing effective psychological resources, because high levels of stress and anxiety would limit the possibility of using them. Furthermore, as mentioned above, the perception of higher levels of competitive anxiety would cause a shift of attentional focus on performance factors and would increase the fear of error, not allowing the athlete to be focused on learning tools and strategies to function in an efficient manner. most appropriate form according to the demands of the competition.

Thirdly, elaborating on the arguments justifying these relationships, the structural equation model provided significant, indirect, and positive relationships between empowering climate and sport psychological skills through self-confidence. This would reveal the importance of developing self-confidence in a motivational climate that fosters emotional support and promotes an environment of trust and security[87] as it creates a very conducive scenario for the development of psychological skills that determine athletic performance.[88, 89] In this way, the data would be highlighting, as is consistent, that the

development of self-confidence through appropriate interactions between the coach and the players is fundamental for a more appropriate psychological development of the athlete. This assigns a very important role to coaches in fostering athletes' sport psychological skills, as it demonstrates the impact that their behavior has on their learning.[41, 90, 91]

Finally, this can also be observed in the indirect relationships between disempowering climate and sport psychological skills through competitive anxiety, as it has been significantly and negatively related to negative coping control and attentional control. These data suggest that disempowering climate, through increased anxiety, could affect the athlete's psychological development,[92, 93] impairing them in improving aspects that could help them cope with competition demands more effectively. Thus, the importance of coaches generating empowering motivational climates and avoiding promoting disempowering climates is highlighted, as they are key individuals who can influence athletes' development.[94]

As limitations of the study, despite having a large sample size, it would be more enriching for the results to increase the number of participants. Also, regarding the motivational climate and due to the age of the sample, it could be interesting to include other potentially influential variables on the athlete in the measurement, such as their family or the environment around them. Furthermore, applying this model to different sports and levels of demand could be interesting to evaluate whether the perception of the motivational climate is determined by the demand of the sporting discipline and by the theoretical objectives that the teams have based on the clubs' expectations. Furthermore, the sample represents a wide age range, in which participants who begin adolescence coexist with others who finish it. Therefore, the level of maturation of the different participants is different and this could partially condition the results. Besides the sample

is only made up of males. Future studies should include girls to determine if the model is reproduced in both genders. Considering these limitations, it would be interesting to continue generating lines of research that try to address these gaps. For this purpose, it would be a valuable contribution to increase the sample size to obtain results more closely aligned with the population. Additionally, it would be advisable to measure the motivational style of the family members, as well as that of the athletes' reference environment. Likewise, it would be interesting to explore other research designs such as longitudinal ones, in which the changes produced over time can be observed in a more consistent way.

The present research has important practical implications in the field of sport, specifically when training young soccer players. On the one hand, the importance of empowering and disempowering climates for the optimal psychological development of the athlete is highlighted. Thus, it has been observed how the empowering climate has positive implications for the development of self-confidence and some of the most important sports psychological skills linked to sports performance. Specifically, this research reveals the importance of coaches planning their behavior and the type of interaction they have with soccer players. Thus, ensuring that athletes develop in an environment that encourages their confidence is essential to learn and develop their abilities. Therefore, the transmission of social support, promoting the athlete's continuous progression and generating a climate of trust between coaches and athletes is vital for young soccer players to have optimal experiences and a greater probability of reaching their highest peak of development.

Conclusions

The findings of this study reveal positive and statistically significant associations between empowering motivational climate and self-confidence, between disempowering climate

and competitive anxiety, as well as between self-confidence and sport psychological skills (negative coping control and attentional control). Additionally, the analyses highlighted negative relationships between competitive anxiety and negative coping control and attentional control. Furthermore, the model showed indirect associations between empowering climate and negative coping control and attentional control through self-confidence, as well as between disempowering climate and negative coping control and attentional control through competitive anxiety. This information could be useful for professionals in the field of sports, whether they are coaches, psychologists, athletes, managers, or even individuals who are influential to the athletes, such as their family members or closest environment.

Disclosure Statement

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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