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Fear of failure and perception of the motivational climate under the coach pressure

Manuel Gómez-López[1,2], Alfonso Valero-Valenzuela[1,3], David Manzano-Sánchez[3,4] and Juan González-Hernández[5]

Abstract

The motivational climate perceived by players is a psychosocial process that has an impact on how they adjust their psychological response to performance situations with greater or lesser efficiency and balance. The aim of this study was to identify distinctive profiles of fear of failure and basic psychological needs in young handball players according to perceived motivational climate (mastery vs. performance). It examined differences in the distribution of gender and age and satisfaction of basic psychological needs and fear of failure within each profile. The study participants were 681 young (M = 16.16 years; SD = 0.92) handball players. A battery of scales adapted to Spanish was administered to measure motivational climate, fear of failure, and basic psychological needs. Central tendency, correlational, cluster, and comparative analysis (multivariate analysis) were applied to determine two profiles (Cluster 1 vs. Cluster 2). The Cluster 1 was characterized by those players with the highest values in the perception of a mastery climate, and the Cluster 2 included those players with a mixed mastery/ performance climate. The results may provide relevant information suggesting that a climate high in mastery and performance is preferable to a climate that is moderately high in both dimensions. They are useful to coaches in designing and adjusting training programs so that their athletes can enhance resources under balanced psychological efforts that reduce discomfort and flight, thus improving adaptation skills to coping with competitive demands and pressure.

Keywords

Basic psychological needs, gender, handball, shame, well-being

Introduction

During the player's training process, competition becomes a context of ability and achievement, in which the athlete tries to achieve success by demonstrating his or her skills, abilities, and competencies.[1,2] When this environment favors the learning of behaviors and attitudes that involve responsibility, eagerness to excel, and self-control, sports practice contributes to the psychological, personal, and social development of the athlete.[3]

On the other hand, and especially in highly competitive contexts, sport is also a means through which athletes can perceive they are not very competent in front of their peers,[4] generating public exposure before others, where athletes often experience fear of failure, in which their performance is evaluated by external agents (e.g. the coach) based on criteria usually based on performance and success.[5]

Reviewers: Thelma Horn (Miami University, OH, USA)
Ludwig Vogel (Bielefeld University, Germany)

[1]Department of Physical Activity and Sport, Faculty of Sport Sciences, University of Murcia, San Javier, Spain
[2]Human Performance & Sports Sciences Research Group, Faculty of Sport Sciences, University of Murcia, San Javier, Spain
[3]SAFE Research Group (Salud, Actividad Física y Educación), Faculty of Sport Sciences, University of Murcia, San Javier, Spain
[4]Department of Didactics of Musical, Plastic and Corporal Expression, Faculty of Education and Psychology, University of Extremadura, Badajoz, Spain
[5]Department of Personality, Evaluation and Psychological Treatment, University of Granada, Granada, Spain

Corresponding author:
Alfonso Valero-Valenzuela, Department of Physical Activity and Sport, Faculty of Sport Sciences, University of Murcia. PC: 30720. C/ Argentina, s/n. Santiago de la Ribera, Murcia, Spain.
Email: avalero@um.es

Fear of failure is understood as the stable tendency to anticipate shame and humiliation after failure.[6–8] Theoretical frameworks,[5,6,9] define that this fear of failure appears when the athlete allows others to be in charge of controlling/evaluating his/her behavior over his/her self-evaluation and introspection processes, seeking approval from such external evaluators and/or fearing disapproval. Therefore, it is very important that the athlete learns and possesses the ability to manage and control these types of situations since poor management of these can lead to errors or mistakes.[10,11] Therefore, feeling and perceiving psychological vulnerability close to making mistakes in highly competitive sports practice promotes in the athlete the fear of failure, feeling of shame that would cause insecurity, anxiety, and even blocking or freezing of thoughts that deriving in cognitive errors (e.g. lack of concentration, high self-criticism) or avoidance behaviors (e.g. conflict with others, simulate injuries), especially close and during competition and influencing a relevant reduction in health (or well-being) and performance.[10,12] Therefore, fear of failure is a feeling with environmental antecedents and consequences on behavior, which can be perceived and interpreted by athletes in multiple ways and, therefore, can also affect them differently depending on time, context, and relationship.[13,14]

In the sports context, the importance of significant agents, and especially the figure of the coach,[15] must be highlighted, as it is essential in the construction of motivational climates.[16] To analyze the impact of their influence on athletes' psychological adjustment, two of the most argued theoretical approaches are the self-determination theory (SDT)[17,18] and the achievement goals theory (AGT).[19,20] The latter theory considers that, in a purposive way, people organize their efforts (including behaviors, cognitions, and emotions) to achieve a given goal, either towards the attainment of internal drives (ego) satisfaction or towards the valuation of the learning that such goal orientation entails (task). Taken to the world of sport, this approach analyzes the psychological adjustment of athletes from both perspectives in the focus both well-being and performance, which are not mutually exclusive but coexistent.

According to AGT and SDT, when the coaches value the effort and attitudinal improvement of their athletes, they focus their attention on aspects of learning taking into account their point of view, promoting positive personal relationships, favoring the development of a mastery-oriented climate, and enjoying more the sports learning process, thus promoting the satisfaction of psychological basic needs (competence, autonomy, and social relationships). In contrast, when the coaches put emphasis on the result, punishing mistakes, prioritizing successes as the only way to reinforce progress, or are not concerned about the personal relationships among their athletes, they favor a performance-oriented climate and the basic psychological needs of his players are not satisfied.[21,22] Literature has shown that a task-involvement motivational climate or mastery-oriented climate promotes a higher level of self-esteem, satisfaction, well-being, adherence, and enjoyment with sports practice among athletes,[23,24] whereas an ego-oriented motivational climate or a performance-oriented climate is linked to anxiety, burnout, conflict,[25,26] poorer emotional management and difficulties in sports learning.[12] Ames[27] introduced the terms mastery climate and performance climate, to describe the environment that favors or generates the coach in the sports context.

In team sports, it has been shown that depending on the behavior adopted by the coach during the training stages, the way he/she interacts with his/her athletes, and the motivational climate he/she favors, fear of failure, satisfaction, and continuity with sports practice are facilitated or impaired,[12] as well as the satisfaction/frustration of basic psychological needs, the degree of motivation, involvement, and commitment of the athlete.[21,28] In this way, it is possible to differentiate coaching behaviors that conform to a more controlling style versus one that is more supportive of athlete autonomy.[29,30]

Literature has shown that more controlling styles impair and impede the satisfaction of basic psychological needs, decreasing the well-being of athletes or causing them to have a less positive experience, whereas styles that support autonomy favor perceptions of competence, social bonds, self-esteem, and cohesion of team members.[31]

Therefore, it can be stated that team sport is a context conducive to social interaction, full of psychological responses, and in constant interaction between the different protagonists of the sports situation (e.g. players, coaches, team). Such processes must be effectively managed by the coach as the person in charge of the search for the "psychosocial balances" necessary for the improvement of both individual and group performance.[32]

Attending therefore to the literature reviewed, the objectives of the present study were to identify different distinctive profiles (clusters) of young handball players according to the perceived motivational climate favored by their coach, examining their differences according to gender, age, satisfaction of basic psychological needs, and fear of failure. The study hypotheses expected that those who perceived a more performance-oriented climate would show higher indicators of fear of failure and lower satisfaction of basic psychological needs (and linked to more rigid or not very rational profiles), while those who perceived a more mastery-oriented climate would show lower effects of fear of failure and higher satisfaction of basic psychological needs (linked to more reflective and flexible profiles).

Method

Participants

A total of 681 team sports players belonging to different clubs in Spain participated (391 boys, 57.4%; 290 girls,

42.6%), with an average age of 16.16 years (SD = 0.92). According to age, 20.9% (n = 142) of the participants were <15 years old, while 79.1% (n = 539) were >15 years old. Most of them stated that they had more than 5 years of sports experience (75.5%, n = 514) and they spent more than two trainings/week (96.3%, n = 656) and more than 3 h/week (90.3%, n = 615). The level of competition for all players is regional. The first places in the regional leagues then compete for the national finals of the Spanish Championship. Table 1 reflects the distribution according to the frequency and duration of weekly sports practice and the federated sports experience of the players.

Instruments

Perceived Motivational Climate in Sport Questionnaire (PMCSQ-2).[22,33] This is a questionnaire that assesses athletes' perception of the motivational climate created by the coach. The Spanish version[34,35] was validated in Spanish elite female senior handball players and includes 29 items grouped in two dimensions measuring the performance-oriented climate (14 items, e.g. "On this team, the coach gives most of his or her attention to the stars") and the mastery-oriented climate (15 items, e.g. "On this team, the coach emphasizes always trying to do your best"). Responses were provided on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency analysis was satisfactory for the two subscales mastery (α = .85), and competitive (α = 0.83).

Performance failure appraisal inventory.[7] This scale consists of 25 items measuring beliefs associated with aversive consequences of failure. The Spanish long version[9] was applied to basketball players (12 to 16 years old). This version includes the items grouped in five dimensions: Fear of Experiencing Shame and Embarrassment (e.g. "When I am not succeeding, I am less valuable than when I succeed"), Fear of Devaluing One's Self-estimate (e.g. "When I am failing, I blame my lack of talent"), Fear of Having an Uncertain Future (e.g. "When I am failing, my future seems uncertain"), Fear of Important Others Losing Interest (e.g. "When I am not succeeding, people are less interested in me"), and Fear of Upsetting Important Others (e.g. "When I am failing, it upsets important others"). Responses were provided on a 5-point Likert scale ranging from 1 (do not believe at all) to 5 (believe 100% of the time). Here the internal consistency analysis was satisfactory for the different subscales; fear of experiencing shame and embarrassment, α = 0.84; fear of devaluing one's self-esteem α = 0.70; fear of having an uncertain future, α = 0.65; fear of important others losing interest, α = 0.86; fear of upsetting important others, α = 0.84. The "fear of having an uncertain future" factor showed less reliability than the recommended value of 0.70, and it should be considered as a study limitation.

Basic Psychological Needs in Exercise Scale.[36] This questionnaire seeks analyze the satisfaction of basic psychological needs in physical exercise. The Spanish version[37] was validated in a sample of people who practiced physical exercise regularly (16 to 53 years old). It includes 12 items divided into three dimensions, with four items per dimension, to assess autonomy (e.g. "The way I exercise is in agreement with my choices and interests"), competence (e.g. "I feel I perform successfully the activities of my exercise programme"), and relatedness (e.g. "My relationships with the people I exercise with are close"). Responses were provided on a 5-point Likert scale ranging from 1 (I don't agree at all) to 5 (I completely agree). The internal consistency analysis was satisfactory for the three subscales: autonomy (α = 0.60), competence (α = 0.64), and relatedness (α = 0.74). The "autonomy" and "competence" factors showed less reliability than the recommended value of .70 and they should be considered as a study limitation.

Table 1. Socio-demographic and sporting characteristics of participants.

		N	%
Gender	Boys	391	57.4%
	Girls	290	42.6%
Age-game category	Cadets (14–15 years old)	142	20.9%
	Youth (16–17 years old)	539	79.1%
Sports experience	up to 5 years	167	24.5%
	more than 5 years	514	75.5%
Trainings/week	Up to 2 trainings/week	25	3.7%
	More than 2 trainings/week	656	96.3%
Training hours/week	Up to 3 h/week	66	9.7%
	More than 3 h/week	615	90.3%

Procedure

The study was carried out in different handball clubs of Spain. A letter explaining the objectives of the research and how it was to be carried out, accompanied by two models of informed consent and permission (one for the parents and another for the young athletes), together with a copy of the measures, was sent to the clubs before the data collection. The questionnaire was administered by the researchers in the sports facilities of the clubs during the training sessions and completed by the participants in 20–30 min. All the participants were informed of the objectives and of their rights as participants in the study, as well as of the voluntary nature and the absolute confidentiality of the answers and handling of the data. It was explained that there were no correct or incorrect answers so that participants would answer with the most sincerity and honesty. Data were collected in February 2023. Once all the data had been collected, they were transferred to the Excel 2010 program for subsequent treatment in the SPSS 23.0

statistical analysis program. The protocol was approved by the Ethics Committee of the Universidad de Murcia (ID: 1494/2017). All subjects gave written informed consent in accordance with the Declaration of Helsinki.[38]

Statistical analysis

Following previous studies, the following process was carried out.[39,40] First, a reliability analysis of all the scales was performed and then the Mahalanobis distance was used in order to detect and eliminate those subjects who were atypical or did not follow a logical pattern in the set of variables. In addition, skewness and kurtosis values (> 3 or > 10, respectively) were analyzed, together with Z-scores (> 3). After eliminating 26 subjects who did not meet these requirements, the reliability analysis of the different scales was again carried out, finally having a total sample of 681 subjects, the reliability analysis of the different scales was again carried out and a descriptive and correlation analysis was started.

Secondly, according to the first objective of this study, to identify clusters of athletes on the basis of the perceived motivational climate, a profile analysis (cluster) was performed using the coach's motivational climate (Cluster 1 or Cluster 2) as an independent variable. To determine the number of profiles, a dendrogram analysis was first performed using the hierarchical method (Ward procedure) with Squared Euclidean distance between observations as the dissimilarity measure suggesting the development of two to four sets. Next, a two-stage clustering corroborated a silhouette measure of cohesion and cluster separation considered as good (> 0.5) for two sets. Finally, the K-means method was used to make the final clusters with two clusters.

Finally, to answer the second purpose and examine the differences according to gender and category in basic psychological needs and fear of failure, a multivariate analysis (MANOVA) was carried out to check whether there were statistically significant differences in each of the variables under investigation and subsequently, univariate analysis (ANOVA) were performed according to the differences found in each of the variables under investigation. In addition, the clusters were analyzed according to gender and grouped age by means of a chi-square analysis with 2×2 contingency tables. Statistical analysis was performed using the IBM SSPS 23.0 package. This established a level of significance of $p < 0.05$.

Results

Descriptive and correlation analysis

Table 2 shows the descriptive analyses of the different variables under study. Skewness and kurtosis values showed adequate values (< 3 skewness and < 10 kurtosis). Finally, correlations were significant at $p < 0.001$ except for competition and fear of angering others which was at $p < 0.05$. The variables that had no correlation were the performance climate with autonomy and competence, in addition to autonomy with all causes of fear of failure except with the scale of experiencing embarrassment. The mastery climate had an inverse correlation with the execution climate and fear of failure, as well as a direct correlation with basic psychological needs. In contrast, the performance climate showed an inverse correlation with social relations and a direct correlation with fear of failure.

Cluster analysis

Cluster analysis was performed according to the considerations of Hair, Anderson.[41] The dendrogram obtained suggested the existence of two clusters. Finally, the existence of two types of athlete profiles was suggested. The clusters were grouped into Cluster 1 (N = 350; 51.4%), with statistically significant higher values in the mastery climate and lower values in the performance climate, and Cluster 2 (n = 331; 48.6%) with moderate scores above the midpoint on both the mastery and performance subscales. The values were in the mastery climate of 4.31 (SD = .44) and 3.76 (SD = 0.57) for Cluster 1 and Cluster 2, respectively, and for the performance climate, 2.21 (SD = 0.40) and 3.32 (SD = .48) for Cluster 1 and Cluster 2, respectively, indicating the profiles after transforming the values obtained into Z scores (figure 1). The significance level was $p = 0.00$ in both cases.

Differences in profiles according to basic psychological needs and fear of failure

A MANOVA was carried out using the clusters as independent variables and the rest of the study variables as dependent variables (see Table 3). Box's test was used to test for homogeneity of covariance (Box's M = 72.451; F = 1.988; $p = 0.00$). Statistically significant differences were found at the multivariate level (Wilks' Lamda = 0.802, F = 20.741, $p = 0.00$). The results of the follow-up univariate test as part of the MANOVA are also presented (see Table 3), showing significant differences for each of the variables analyzed. Cluster 1 obtains higher values for all the basic psychological needs, while Cluster 2 shows higher values in each of the fear of failure variables.

Differences in profiles according to the age and gender of the players

Next, a ANOVA was performed using the cluster as a fixed factor and gender on the one hand, and grouped age on the other hand, as dependent variables. Differences were found according to gender (F = 17.875; $p = 0.000$; $R^2 = 0.260$),

Table 2. Descriptive and correlations analysis.

		M	*SD*	*A*	*K*	α	1	2	3	4	5	6	7	8	9	10
1	Mastery climate	4.05	0.58	−0.685	0.289	0.853		−0.281**	0.277**	0.465**	0.294**	−0.185**	−0.147**	−0.202**	−0.321**	−0.264**
2	Performance climate	2.75	0.71	0.252	−0.396	0.836			−0.043	−0.128**	−0.034	0.305**	0.326**	0.339**	0.438**	0.393**
3	Autonomy	3.83	0.66	−0.073	−0.567	0.603				0.437**	0.570**	−0.110**	−0.038	−0.024	−0.067	−0.056
4	Relatedness	4.27	0.66	−0.707	−0.290	0.744					0.514**	−0.188**	−0.150**	−0.200**	−0.338**	−0.309**
5	Competence	3.98	0.62	−0.310	−0.256	0.635						−0.139**	−0.122**	−0.106**	−0.127**	−0.095*
6	Fear experiencing shame embarrassment (F1)	2.61	0.92	0.161	−0.719	0.841							0.702**	0.607**	0.614**	0.618**
7	Fear devaluing ones self-estimate (F2)	2.49	0.88	0.279	−0.365	0.701								0.677**	0.599**	0.626**
8	Fear having uncertain future (F3)	2.27	0.84	0.603	0.082	0.654									0.697**	0.709**
9	Fear important other losting interest (F4)	2.01	0.91	0.774	−0.099	0.862										0.809**
10	Fear upsetting important others (F5)	2.10	0.91	0.652	−0.364	0.842										

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

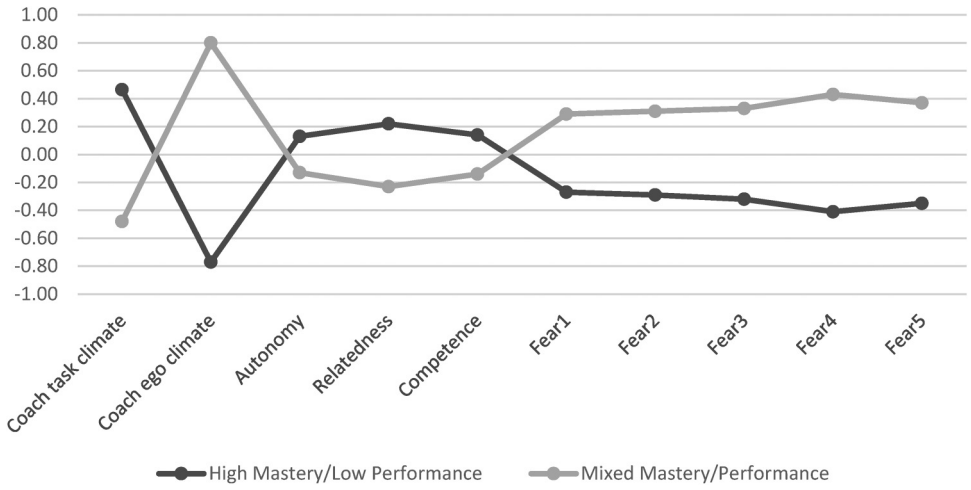

Figure 1. Cluster Z values for the different variables.

but not according to the age of the participants ($F = 0.563$; $p = 0.453$; $R^2 = 0.001$) (Table 4). According to the gender of the participants, statistically significant differences were found in the clusters found.

Cluster 1 was positively associated with women (60.7% vs. 44.5% of men) and cluster 2 with men (55.5% vs. 39.3% of women), suggesting that men obtained a profile more related to the performance climate, and women to the mastery climate.

Discussion

The objectives of the present study were to identify the distinctive profiles (clusters) of young players according to the perceived motivational climate favored by the coaches and to examine their differences according to gender, age, satisfaction of basic psychological needs, and fear of failure. The hypotheses sought confirm that those athletes that perceived a mastery climate showed more adaptive psychological functionality and those that perceived a performance climate showed more disadaptive psychological response.

The results of the descriptive analysis showed that most of the players were characterized by perceiving a climate of mastery in training and competitions, by feeling their basic psychological needs satisfied, especially that of social relationships, and by showing that shame is the main aversive cause of fear of failure. Therefore, this data allows confirmation of the hypotheses formulated.

In relation to the perception of motivational climate, the results coincide with previous studies that followed a similar trend, also conducted in team sports and with similar samples.[21,28,42–44] The literature so far has shown that coaches who transmit a climate of mastery in their players encourage effort, interest in learning, progression, and self-improvement through comparison with oneself to assess their level of competence, the development of their skills, and cooperation among team components.[45,46] Likewise, different studies also reflected those athletes subjected to this type of motivational climate increased their satisfaction and enjoyment with sports practice[28] and decreased fear of failure and competitive anxiety.[12,47]

On the other hand, we find those players who train under a performance climate, suffer from higher levels of both fear of failure and anxiety and lower satisfaction with the practice of their sport.[12,47,48] This climate promotes social comparison as the basis for success, and rewards, which are based on the demonstration of performance, are established in a public manner.[46]

The relevant construction of the climate by the coach-player dyad

Literature has also shown that the motivational climate favored by the coach influences motivation through the satisfaction of basic psychological needs.[49] Alesi, Gómez-López[25] model (with a similar handball players sample) showed that basic psychological needs mediated between mastery climate and self-determined motivation, and the latter between needs and sport commitment. Specifically, mastery climate positively predicted the self-determination index and sport commitment, through the satisfaction of basic psychological needs.

The satisfaction or frustration of basic psychological needs will determine a series of consequences at both cognitive, affective and behavioral levels.[50] In this case, as already emphasized by Deci and Ryan,[18] social relatedness (degree to which players seek interaction, a sense of belonging and connection with the rest of the teammates) is the psychological substrate alluded to by most of the athletes in this study, and it is possible to consider it as the key aspect built by a mastery and autonomy-fostering climate.

Table 3. Differences in profiles according to basic psychological needs and fear of failure.

	Cluster 1 (High mastery/ Low performance)		Cluster 2 (Mixed mastery/ performance)		F	p
	M	SD	M	SD		
Autonomy	3.91	0.66	3.75	0.66	10.632	0.001**
Relatedness	4.42	0.61	4.11	0.67	39.807	0.000**
Competence	4.06	0.59	3.90	0.64	12.770	0.000**
Fear experiencing shame embarrassment (F1)	2.35	0.87	2.87	0.90	58.931	0.000**
Fear devaluing ones self-estimate (F2)	2.23	0.78	2.77	0.89	68.236	0.000**
Fear having uncertain future (F3)	2.00	0.69	2.56	0.90	82.928	0.000**
Fear important other losing interest (F4)	1.64	0.71	2.41	0.93	148.542	0.000**
Fear upsetting important others (F5)	1.78	0.73	2.45	0.96	104.598	0.000**

M de box = 72.451 (f = 1.988) $p = 0.000$.
Lamda de Wilks (λ) = 0.802 (f = 20.741) $p = 0.000$.
Note. M = Mean; SD = Standard deviation; **$p < 0.01$.

Previous studies highlighted that the practitioners of collective sports were favored over those of individual modalities in the perception of competence.[51]

Likewise, embarrassment appears among the results found as the negative cause most alleged by adolescent athletes facing a competitive environment where they have to prove their worth and skill in the game under the direct evaluation of their coach, peers, and/or parents. Literature has shown that the most frequent aversive cause of fear of failure is embarrassment.[51–53] In fact, Sagar and Stoeber[54] reflected that the only significant predictor in relation to fear of failure was fear of experiencing embarrassment. Recent studies have revealed that fear of experiencing embarrassment is associated with high levels of psychological stress[55] and competitive anxiety.[12,56] Likewise, coaches who foster a climate of mastery consider mistakes as part of the players' learning in their formative process, thus favoring the way players cope with this feeling, which decreases their fear of failure.[9,47]

Psychological functionality of the players, and its correspondence in the adaptation to the demands of training

When training contexts are exposed (independently of the generation of mastery-oriented or performance-oriented climates), it is of great importance to check the "psychological behavior" of the players. This will shape the way they function under the rules, routines and strategies proposed by the team management. Regardless of its initial positive or negative appreciation, the function of the psychological response (e.g. fear of failure, extra involvement in the tasks) is the symptom of psychological processes (e.g. embarrassment at being evaluated or punished in public, need to please) that must necessarily be attended to, trained and observed so that its evolution (from positive to negative or vice versa) can generate the least distortion or discomfort in the athlete.

The cluster analysis offered the existence of two clearly differentiated profiles of players. The so-called Cluster 1 (more functional) is made up mostly of girls and with a high perception of mastery climate and low of performance climate, and on the other hand, Cluster 2 (more disfunctional), with a majority of boys and a mixed mastery/performance climate. These results coincided with those found in other previous study conducted with handball players, in which the perception of performance climate is higher in boys.[21]

The results of the study also showed that for both profiles of athletes the least satisfied basic psychological need is autonomy, in contrast to social relationships where satisfaction levels were higher in the group of Cluster 1 athletes. This result contrasts radically with classic studies on basic psychological needs in athletes. Deci and Ryan[18] defined

Table 4. Differences in profiles according to the age and gender of the players.

		Cluster 1 (n = 350) 51.4%		Cluster 2 (n = 331) 48.6%	
		N	%	n	%
Gender	Boys	174	44,5%	217	55,5%
	Girls	176	60,7%	114	39,3%
	F				17.875
	p				.000**
Age-game category	Cadets	69	48,6%	73	51,4%
	Youth	281	52,1%	258	47,9%
	F				0.563
	p				0.453

Note. **$p < 0.001$.

the psychological substrate autonomy as being the origin or source of one's own behavior. In any context, people tend to get involved in the tasks they perform if they consider that they have some control over the environment and allow them to develop their capabilities.[57,58] Therefore, an interpersonal style that promotes autonomy will favor the satisfaction of basic psychological needs.[57] To promote autonomy, the coach should be flexible, accept opinions, show empathy with the players, and provide adequate information during training sessions.[59] Controlling coaches are usually coercive and authoritarian.[60] This coach profile orients sports practice to performance and focuses more on developing their ideas than on attending to the needs, satisfaction, or well-being of their athletes.[61] Literature has shown that a controlling style is positively related to the perception of a motivational climate of performance.[58]

Regarding the different aversive causes of the fear of making a mistake during the game, the levels were higher in all causes in Cluster 2 players, with shame being the one with the highest score, followed by a devaluation of self-esteem.[62] This feeling of shame creates in athletes a certain degree of insecurity, anxiety stress, and avoidance behaviors, due to what others may say or think, especially during the game, thus causing a decrease in the player's performance.[9] Conroy, Poczwardowski[6] defined fear of failure as a stable tendency to anticipate embarrassment and humiliation after failure.

Although the results found on the fear of failure according to the gender of the athletes are scarce, the literature reveals that boys present a greater fear of making a mistake than girls,[47,63] thus coinciding with the results found in the study. These results differ from those found by Amiryan, Hejazi Dinan[64] where girls experienced greater fear of failure than boys. If we analyze the different causes, Gómez-López, Ruiz-Sánchez[47] and Correia, Rosado[52] revealed that girls presented higher values for fear of experiencing embarrassment and fear of self-devaluation, and lower values for fear of having an uncertain future, losing the interest of others, and disturbance to significant others than men. On the other hand, Sagar and Jowett[53] showed that boys experienced less fear of self-esteem devaluation than girls.

Limitations and new research focuses

With regard to the limitations of the study, it should be noted that although the results extend the information that exists and has been published so far, the specificity and selection of the sample examined, which was intentional, limits its generalization. In the future, more replications are needed in other sports levels and other age ranges, covering all ages of adolescence. A second limitation comes from the measurement of the perception of motivational climate. In this sense, contrasting the information obtained with that which could be provided by the coach himself,[65] would provide a value of greater objectivity between what was observed at the different levels of the sports situation studied (young athletes and coaches). It would also be interesting to consider in the analysis the six factors that make up the dimensions found to underlie a mastery-oriented climate (Effort/Improvement, Important Role, and Cooperative Learning) and performance-oriented climate (Intra-Team Member Rivalry, Unequal Recognition, and Punishment for Mistakes).

In order to focus on new approaches to the research, the interesting and appreciable interactions emerging from the present study between age category and gender, showing differences in perceived motivational climate (although not in age or competitive level), should be the subject of further in-depth studies, as well as their contrast with other typologies of samples of young athletes (individual sports), other sports cultures (e.g. combat sports) or in other countries.

Also, we consider that could be important of longitudinal proposals through multilevel studies that take into account certain gaps in the literature. This could provide greater clarity on the correspondences between training styles and the impact on the psychosocial response (internal and external) of their athletes as a function of different sporting circumstances (e.g. streaks of good or bad games, opinions of starting or substitute players) or other personality (e.g. impulsivity, perfectionism, self-esteem) or social (e.g. parental pressure, category transition) influences.

Finally, it should be noted that this study provides new and significant information for the coach that will allow him to individualize the treatment of his players. In other words, the results provide relevant information for coaches, as they will help them design individualized training programs that will improve athletes' performance while

ensuring their health and well-being. The bibliographic review carried out confirms the scarcity of similar studies published more specifically in basketball and handball. Furthermore, it constitutes a preliminary study to guide future research in which the main objective would be to carry out individualized psychological interventions for coaches to improve satisfaction in the practice of sports by their players.

Conclusions

The line of investigation initiated in this study has important practical repercussions in the design of intervention programs focused on the psychological variables analyzed (satisfaction of basic psychological needs and fear of failure) and their possible determinants with the aim of improving the performance and the quality of life of the sportsmen.

In line with the most current views on psychological adaptation and functionality in the social contexts offered by sport, the perception of the motivational climate created by coaches in the locker room and competition situations facilitates and generates that most players focus on a mastery climate in training and competitions, feeling more satisfied their psychological needs (mainly that of social relationship) and reduced their feelings of shame, the main aversive cause of fear of failure. In addition, it favors the appearance of emotional regulation processes and cognitive re-evaluation of errors, doubts or concerns, as well as the meaning of those stressors that have a negative impact (e.g. shame). In contexts where performance-oriented climate (internal drives and extreme needs such as identification or narcissism) and outcome determinism are a priority, the cognitive response (e.g. rumination; obsessivity) of athletes elevates the tendency to repress the drive and extreme desire to "succeed above all else," resulting in processes of emotional maladjustment (e.g. shame, anger, defensive struggle) that inhibit externalized behavior.

On the other hand, the cluster analysis offered the existence of two clearly differentiated profiles of players. On the one hand, the so-called Cluster 1, made up mostly of girls and with a higher perception of a mastery climate, and on the other hand, Cluster 2, with a majority of boys and a higher perception of a performance climate. In both profiles, the least satisfied basic psychological need was autonomy, as opposed to social relations, where satisfaction levels were higher in the group of Cluster 1 players. As for the different aversive causes of the fear of making a mistake during the game, the levels were higher in all causes in the Cluster 2 players, with shame being the one with the highest score, followed by a devaluation of self-esteem. These results do suggest that a climate high in mastery and low in performance is preferable to a climate that is moderately high in both dimensions.

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

ORCID iDs

Manuel Gómez-López https://orcid.org/0000-0002-4595-3994
Alfonso Valero-Valenzuela https://orcid.org/0000-0002-4317-1665

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