Motivational Climate, Satisfaction of Basic Psychological Needs and Fear of Failure in Young Athletes.
Differences and Consistencies in Team Sports

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

[1] Research Group Salud, Actividad Física y Educación (SAFE), Department of Physical Activity and Sport. Faculty of Sport Sciences. University of Murcia, 30720 San Javier – Murcia, Spain

[2] Department of Physical Activity and Sport. Faculty of Sport Sciences. University of Murcia, 30720 San Javier – Murcia, Spain

[3] Department of Personality, Evaluation and Psychological Treatment, University of Granada, 18071 Granada, Spain

[4] Research Group Análisis Comportamental de la Actividad Física y el Deporte (ACAFYDE), Department of Didactics of Musical, Plastic and Corporal Expression, University of Extremadura, 06006 Badajoz, Spain

The aim of the study was to analyze the motivational climate perceived by a group of young athletes and its relationship with adaptive (basic psychological needs) and inhibitory (causes of fear of error) aspects of behavior, also pointing out the differences according to sex and age. The sample consisted of 681 players between 14 and 17 years of age belonging to different Spanish basketball and handball clubs, who responded to standardized tests on their adaptive resources to the perception of the climate constructed by their coaches. The results showed that, as a greater task-involving climate is perceived, the satisfaction of basic psychological needs increases (mainly relatedness), while the aversive causes of fear of failure decrease (mainly the fear of losing the interest of others and the fear of angering significant others). Regarding gender, girls showed statistically significant differences in the levels of task-involving climate and relatedness satisfaction, while boys showed significantly more ego-involving climate, fear of having an uncertain future, fear of losing the interest of others, and fear of angering significant others. With respect to age, differences in task climate were only found in favor of younger athletes (14-15 years). Overall, this study underlines the educational role of the coach in young team sports players. Specifically, the promotion of a task climate favors relatedness and decreases the motives and the occurrence of cognitive-emotional processes of fear of failure in young team sports players.

Key words: autonomy, competence, error, embarrassment, relatedness

Correspondence concerning this article should be addressed to Manuel Gómez-López, Department of Physical Activity and Sport, University of Murcia, Spain. E-mail: mgomezlop@um.es

Introduction

When high expectations are pursued, linking achievements to a social image, associating hard work with the guarantee for success, and establishing relationships according to whether or not sporting results are obtained, any aspect that hinders or prevents them from being achieved, even error, has a high emotional impact on athletes (Gómez-López et al., 2020). Socializing influence involves the influence of surrounding figures (e.g., coaches, parents, peers) who impact not only their development and identity as athletes (Duda & Balaguer, 2007; Gómez-López et al., 2019a; Roberts, 2012) but their effectiveness and suffering in competition as well (Gómez-López et al., 2020, 2019b; Wikman et al., 2014). Moreover, in team sports, during the initiation and technification stages, the literature has shown for years that the coach plays a fundamental role in the way in which the player faces the tasks proposed in training and competitions (Granero-Gallegos et al., 2017).

Although fear of failure is inherent in all sports, it is especially relevant in team sports (Alesi et al., 2020). As part of a team in which efforts and achievement orientations are shared, the failure of the other is perceived as one's own because he or she is part of the same team (Gómez-López et al., 2020). Thus, if the team is harmed when one of its members fails, the player who does not fail also feels harmed even though he or she must provide adequate support to the rest of the group to maintain the state of cohesion and strive for common goals (Sagar & Jowet, 2012; Sign et al., 2023).

To analyze the impact that the coach's behavior has on the motivation of athletes, two theoretical contexts have developed important research in sport in the training stages: the Self-Determination Theory (SDT; Deci & Ryan, 1985; 2000) and the Achievement Goals Theory (AGT; Duda & Nicholls, 1992). Following the SDT, basic psychological needs take into account that the reactivity and behavior of a human being are oriented under the functionality of three basic psychological needs (feeling competent, feeling autonomous, and feeling positive quality in relatedness), understood as essential psychological nutrients for growth, integrity, and well-being (Vansteenkiste et al., 2020). According to the AGT, depending on how athletes perceive the context in which they develop, there would be, according to some authors, an ego-involving motivational climate and a task-involving motivational climate (Duda, 2001; Urdan & Kaplan, 2020).

The important impact that the coach exerts on the behavior of his/her athletes through motivational climates, influences the behaviors, thoughts, and feelings that the athlete presents (Curran et al., 2015; Duda et al., 2018). When the coach values the effort of his/her athletes and not only the results, he or she encourages personal progression and increases the likelihood of developing a climate of involvement in the task (Mars et al., 2017). On the other hand, when a coach emphasizes the result and the most important thing is the victory of the team, he/she increases the possibility of generating an ego-involving climate (Newton et al., 2000; Olympiou et al., 2008).

Even though sport is one of the most ideal contexts for achievement, different authors claim that due to the level of competitiveness established among the peer group, it is also an environment in which you can present yourself (competent or incompetent) before the rest of your peers (Atkins et al., 2015; Cecchini-Estrada et al., 2008), provoking in players (with greater impact on younger players) feelings of fear of failure (Moreno-Murcia & Conte, 2011; Ruiz-Sánchez et al., 2017; Wikman et al., 2014).

Conroy et al. (2002) define fear of failure as a stable tendency to anticipate shame and humiliation after failure. According to these authors, fear of failure is based on Lazarus' (1991) cognitive-motivational and relational theory of emotion (Correia et al., 2017). According to this theory, people value emotions as positive or negative depending on the consequences they have for their well-being. Those who perceive the consequences of failure as aversive will see failure as a threat and fear it (Sagar et al., 2007).

According to the AGT approaches, a few studies have found gender or age differences to have an effect on a higher inclination to adopt mastery goals and performance goals, respectively (Butler & Hasenfratz, 2017; Urdan & Kaplan, 2020). Eriksen (2021) carried out interviews with 12 and 13-year-olds exploring gender differences and suggested that boys and girls make similar investments in sports, but there are clear gender differences in the ways they describe their future ambitions. While the boys focus on wanting to become professional athletes and going 'all in', very few of the girls do – the ambitious girls talk more about skills development. A few studies have also explored gender and motivational climate differences in team sports (Van Mierlo & Van Hooft, 2020).

In the few studies that have explored fear of failure in team sports contexts, boys have associated their failure tendencies with aspects such as fear of not achieving goals, not being competitive, or failing other teammates, while girls have done so with feelings of embarrassment or losing other people's interest (Englert & Seiler, 2020; Gómez-López et al., 2019c).

From the literature, it is hypothesized that: a) regardless of gender, the perception of a task-oriented climate will be positively related to basic psychological needs and negatively related to fear of failure, as opposed to a competition-oriented climate, which will be negatively related to basic psychological needs and positively related to fear of failure; b) girls will have a lower ego-involvement climate and a higher task-involvement climate, which will translate into a lower fear of failure, and c) younger athletes would have a more task-involved climate and a less ego-involved climate, so they would have a higher satisfaction of their basic psychological needs and a lower fear of failure.

Thus, the present study aims firstly to analyze the motivational climate generated by the coach and perceived by the athletes and its relationship with the satisfaction of basic psychological needs and the aversive causes of fear of failure, as well as, secondly, to check if there are differences depending on the sex and age of the athletes.

Method

Participants

The sample consisted of 681 adolescents participating in club team sports (basketball and handball) belonging to different Spanish clubs, aged between 14 and 17 years ($M = 16.16$ years old; $SD = 0.92$). According to gender, 391 (57.4%) were boys ($M = 16.17$ years old; $SD = 0.93$) and 290 (42.6%) girls ($M = 16.13$ years old; $SD = 0.91$). Regarding the playing category, 142 of the participants were cadets (14-15 years old), while 539 were juniors (16-17 years old). A total of 96.3% had > 2 weekly training sessions (> 3 hours per week) and 75.5% reported having sport experience > 5 years as club players.

Instruments

Perceived Motivational Climate in Sport Questionnaire (PMCSQ-2). The Spanish version

of this instrument for team sports was used (Balaguer et al., 1997). This scale is composed of 29 items grouped into two dimensions that measure the climate towards ego or competition (14 items; e.g., "The coach gives most of his/her attention to the stars") (α = 0.83) called competition, and the climate towards the task or mastery (15 items; e.g., "Players feel successful when they improve") (α = 0.85). Responses were collected on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Basic Psychological Needs in Exercise Scale (BPNES). The Spanish version of the BPNES (Pineda-Espejel et al., 2019) comprises 12 items divided into three subscales, with four items per subscale, to assess autonomy (e.g., "The way I exercise is in agreement with my choices and interests") (α = 0.60), competence (e.g., "I feel I perform successfully the activities of my exercise programme") (α = 0.64), and relatedness (e.g., "My relationships with the people I exercise with are close") (α = 0.74). Responses were provided on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Performance Failure Appraisal Inventory (PFAI). The long version of the inventory validated in the Spanish context was used (Moreno-Murcia & Conte, 2011). The scale consists of 25 items, grouped into five dimensions: fear of experiencing shame and embarrassment (7 items; e.g., "When I am failing, it is embarrassing if others are there to see it") (α = 0.84), fear of devaluing one's self-estimate (4 items; e.g., "When I am failing, I am afraid that I might not have enough talent") (α = 0.70), fear of having an uncertain future (4 items; e.g., When I am failing, I believe that my future plans will change") (α = 0.65), fear of important others losing interest (5 items; e.g., "When I am not succeeding, people are less interested in me") (α = 0.86), and fear of up-

setting important others (5 items; e.g., "When I am failing, it upsets important others") (α = 0.84). Items began with the sentence *"In the practice of my sport..."*. Responses were collected on a 5-point Likert-type scale ranging from I do not believe it at all (1) to I believe it 100% (5).

Procedure

The study was carried out in different Spanish basketball and handball clubs. This study was conducted in accordance with the ethical guidelines of the American Psychological Association (APA). The protocol was approved by the Ethics Committee of the University of Murcia, Spain (ID: 1494/2017). All participants gave written informed consent in accordance with the Declaration of Helsinki.

Data Analysis

First, a reliability analysis of all scales was performed and then the Mahalanobis distance was used to detect and eliminate those subjects who were outliers or did not follow a logical pattern in the set of variables. In addition, skewness and kurtosis values (>3 or >10 respectively) were analyzed, along with Z-scores (>3). Alpha's Cronbach index was checked and all values were higher than 0.60 considered adequate by Sturmey et al. (2005). The database was then divided according to gender in order to perform a descriptive analysis and bivariate correlations based on perceived motivational climate, fear of failure, and satisfaction of basic psychological needs with a significance level of p < 0.05.

To test for differences according to gender and the category or age of the participants, various multivariate analyses (MANOVA) (Hair et al., 1998) were performed by analyzing the

various univariate tests (ANOVAs), including gender on the one hand and the category of the participants on the other, in a second analysis as independent variables and the variables under study as dependent variables. Statistical analysis was performed using the IBM SSPS 23.0 package.

Results

Descriptive and Correlation Analysis

Tables 1 and 2 show the descriptive analyses and correlations of the different variables under study according to gender. Boys manifested statistically significant correlations on all variables at $p < 0.01$, except between ego-involving (with competence and autonomy) and autonomy (with all fear of failure scales except "fear of experiencing embarrassment"). Girls, on the other hand, did not show the same correlations. Task-involving correlated significantly at $p < 0.01$ with everything except fear of having an uncertain future ($p < 0.05$), and did not correlate with fear of losing self-esteem.

The perceived task-involving climate obtained positive correlations with the three basic psychological needs and negative correlations with the fear of failure scales. On the other hand, ego-involving obtained the opposite results, obtaining positive correlations with the fear of failure scales and negative correlations with the three basic psychological needs.

Tables 3 and 4 show the descriptive analyses and correlations of the variables according to category. For the cadet category, the variables with the lowest correlations were the three basic psychological needs. The rest of the variables did show statistically significant correlations ($p < 0.01$ or $p < 0.05$). On the contrary, for the juvenile category, all variables correlated significantly with each other ($p < 0.01$), except for the ego-involving with autonomy and competence, and the autonomy variable with the fear of experiencing shame and the fear of self-devaluation.

Differences According to Gender and Age of Participants

A multivariate analysis (MANOVA) was carried out using gender as the independent variable and the rest of the study variables as dependent variables (see Table 5). Box's test was used to test for homogeneity of covariance (Box's $M = 121.127$, $F = 2.167$, $p < 0.001$). Statistically significant differences were found at the multivariate level (Wilks' Lambda = .856, $F = 11.299$, $p < 0.001$). Univariate ANOVAs showed statistically significant differences for women in favor of climate toward the task perceived ($F = 22.537$; $p < 0.001$) and relatedness ($F = 6.175$; $p = 0.014$). In contrast, in men statistically significant differences were seen in ego-involving climate perceived ($F = 12.531$; $p < 0.001$), fear of having an uncertain future ($F = 5.452$; $p = 0.020$), fear of losing the interest of others ($F = 31.540$; $p < 0.001$), and fear of angering significant others ($F = 25.324$; $p < 0.001$).

A multivariate analysis (MANOVA) was carried out using the category of play or age as the independent variable and the rest of the study variables as dependent variables (see Table 6). Box's test was used to test for homogeneity of covariance (Box's $M = 99.265$, $F = 1.758$, $p = 0.000$). Statistically significant differences were found at the multivariate level (Wilks' Lambda = .970, $F = 2.082$, $p = 0.024$). Univariate ANOVAs showed statistically significant differences only in task-involving climate perceived in favor of cadets ($F = 6.057$; $p = 0.014$).

Table 1 *Descriptive statistics and correlations of all variables (boys)*

		M	DT	A	K	1	2	3	4	5	6	7	8	9	10
1	Task-involving perceived	3.96	.59	-.570	-.005		-.277**	.327**	.480**	.340**	-.218**	-.180**	-.229**	-.285**	-.276**
2	Ego-involving perceived	2.83	.67	.204	-.337			-.050	-.145**	-.004	.319**	.369**	.336**	.445**	.448**
3	Autonomy	3.87	.66	-.015	-.695				.425**	.576**	-.116*	-.034	-.071	-.082	-.094
4	Relationship with others	4.22	.66	-.519	-.684					.519**	-.277**	-.195**	-.270**	-.370**	-.339**
5	Competition	4.01	.62	-.255	-.453						-.189**	-.149**	-.156**	-.166**	-.155**
6	Fear of experiencing embarrassment	2.55	.93	.172	-.751							.730**	.699**	.730**	.734**
7	Fear of devaluation of oneself	2.51	.91	.318	-.386								.742**	.689**	.710**
8	Fear of having an uncertain future	2.34	.91	.607	-.108									.756**	.780**
9	Fear of losing the important interest of others	2.17	.98	.587	-.487										.856**
10	Fear of disturbing important others	2.25	.97	.489	-.629										

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

Table 2 *Descriptive statistics and correlations of all variables (girls)*

		M	DT	A	K	1	2	3	4	5	6	7	8	9	10
1	Task-involving perceived	4.17	.53	-.827	.931		-.251**	.258**	.419**	.262**	-.184**	-.091	-.121*	-.316**	-.158**
2	Ego-involving perceived	2.65	.74	.394	-.372			-.044	-.086	-.085	.321**	.275**	.338**	.411**	.289**
3	Autonomy	3.78	.68	-.131	-.457				.476**	.553**	-.088	-.048	.037	-.082	-.040
4	Relationship with others	4.34	.65	-.992	.506					.531**	-.075	-.076	-.063	-.247**	-.228**
5	Competition	3.94	.61	-.396	-.008						-.058	-.081	-.039	-.103	-.028
6	Fear of experiencing embarrassment	2.68	.90	.169	-.676							.666**	.479**	.496**	.502**
7	Fear of devaluation of self	2.47	.82	.189	-.410								.558**	.459**	.497**
8	Fear of having an uncertain future	2.19	.72	.352	-.325									.566**	.553**
9	Fear of losing the important interest of others.	1.79	.74	.840	.037										.678**
10	Fear of disturbing important others	1.90	.76	.708	-.393										

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

Table 3 Descriptive statistics and correlations of all variables (cadets/14-15 years old)

		M	DT	A	K	1	2	3	4	5	6	7	8	9	10
1	Task-involving perceived	4.15	.56	-.812	.586		-.182*	.242**	.478**	.304**	-.149**	-.081**	-.249**	-.345**	-.260**
2	Ego-involving perceived	2.81	.69	.190	-.820			.123	.024	.073	.361**	.304**	.242**	.412**	.324**
3	Autonomy	3.77	.62	.034	-.180				.365**	.452**	-.018	.116	.143	.188*	.146
4	Relationship with others	4.34	.69	-.777	-.609					.423**	-.135	-.088	-.135	-.200*	-.225**
5	Competition	4.00	.63	-.182	-.756						-.020	.001	.025	.059	.077
6	Fear of experiencing embarrassment	2.58	.96	.108	-1.035							.730**	.702**	.712**	.755**
7	Fear of devaluation of self	2.51	.98	.408	-.257								.724**	.669**	.748**
8	Fear of having an uncertain future	2.29	.98	.698	-.059									.724**	.756**
9	Fear of losing the important interest of others	2.06	1.02	.940	.097										.843**
10	Fear of disturbing important others	2.13	1.02	.819	-.250										

Note. ** p < 0.01, * p < 0.05

Table 4 Descriptive statistics and correlations of all variables (juniors/16-17 years old)

		M	DT	A	K	1	2	3	4	5	6	7	8	9	10
1	Task-involving perceived	4.02	.58	-.659	.253		-.314**	.299**	.457**	.289**	-.199**	-.170**	-.194**	-.321**	-.266**
2	Ego-involving perceived	2.73	.71	.272	-.289			-.073	-.175**	-.059	.294**	.335**	.372**	.449**	.419**
3	Autonomy	3.85	.68	-.108	-.633				.463**	.599**	-.132*	-.080	-.073	-.135**	-.116**
4	Relationship with others	4.25	.65	-.704	-.160					.541**	-.201**	-.170**	-.225**	-.383**	-.338**
5	Competition	3.98	.61	-.350	-.109						-.172**	-.159**	-.151**	-.185**	-.148**
6	Fear of experiencing embarrassment	2.61	.91	.179	-.622							.694**	.578**	.585**	.581**
7	Fear of devaluation of self	2.49	.85	.221	-.468								.659**	.576**	.585**
8	Fear of having an uncertain future	2.27	.80	.541	.010									.689**	.694**
9	Fear of losing the important interest of others	2.00	.88	.689	-.294										.798**
10	Fear of disturbing important others	2.10	.88	.573	-.493										

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

Table 5 *Multivariate analysis of all variables according to players' gender*

	Boys		Girls				
	M	SD	M	SD	F	p	eTa²
Task-involving perceived	3.96	.59	4.17	.53	22.537	.000**	.032
Ego-involving perceived	2.83	.67	2.65	.74	12.531	.000**	.018
Autonomy	3.87	.66	3.78	.68	2.830	.093	.004
Relationship with others	4.22	.66	4.34	.65	6.175	.013*	.009
Competition	4.01	.62	3.94	.61	2.564	.110	.004
Fear of experiencing embarrassment	2.55	.93	2.68	.90	3.054	.081	.004
Fear of devaluation of self	2.51	.91	2.47	.82	.248	.619	.000
Fear of having an uncertain future	2.34	.91	2.19	.72	5.452	.020**	.008
Fear of losing the important interest of others	2.17	.98	1.79	.74	31.540	.000**	.044
Fear of disturbing important others	2.25	.97	1.90	.76	25.324	.000**	.036

M for box = 121.127 (*F* = 2.167) *p* = 0.000
Wilks' Lambda (λ) = .856 (*F* = 11.299) *p* = 0.000; *eTa²* = .144

Note. M = Mean, *SD* = Standard Deviation, ** *p* < 0.01, * *p* < 0.05, *eTa²* = effect size.

Table 6 *Multivariate analysis of all variables according to players' playing category/age*

	Cadet (14-15 years old)		Youth (16-17 years old)				
	M	SD	M	SD	F	p	eTa²
Task-involving perceived	4.15	.56	4.02	.58	6.057	.014*	.009
Ego-involving perceived	2.81	.69	2.73	.71	1.274	.259	.002
Autonomy	3.77	.62	3.85	.68	1.850	.174	.003
Relationship with others	4.34	.69	4.25	.65	2.243	.135	.003
Competition	4.00	.63	3.98	.61	.170	.680	.000
Fear of experiencing embarrassment	2.58	.96	2.61	.91	.163	.687	.000
Fear of devaluation of self	2.51	.98	2.49	.85	.080	.777	.000
Fear of having an uncertain future	2.29	.98	2.27	.80	.114	.736	.000
Fear of losing the important interest of others	2.06	1.02	2.00	.88	.524	.470	.001
Fear of disturbing important others	2.13	1.02	2.10	.88	.135	.713	.000

M of box = 99.265 (*F* = 1.758) *p* = 0.000
Wilks' Lambda (λ) = .970 (*F* = 2.082) *p* = 0.024; *eTa²* = .030

Note. M = Mean, *SD* = Standard Deviation, ** *p* < 0.01, * *p* < 0.05, *eTa²* = effect size

Discussion

The present study aimed to analyze the motivational climate perceived, basic psychological needs, and fear of failure in adolescent athletes participating in collective sports clubs, according to gender and game category.

The first hypothesis proposed that the correlations would be similar regardless of gender, finding that the task-involving climate perceived would be positively correlated with basic psychological needs and negatively with fear of failure, unlike the climate towards competition. In this sense, speaking only of correlations, we corroborate studies such as that of Ruiz-Sánchez et al. (2017) with youth handball players (16-17 years), seeing the task correlated negatively with fear of failure and positively with ego. It is not surprising, therefore, that the influence of close agents such as the coach, is related to this fear of failure being a subjective emotion that depends largely on external factors (Pineda-Espejel et al., 2019) and that can be increased if there is a perception of a controlling style by the coach (Moreno-Murcia et al., 2019), which can have negative consequences in the form of an increase in sports anxiety (Correia & Rosado, 2018).

In turn, highlighting the basic psychological needs, it is evident how a climate where greater support from the coach is perceived allows for increasing satisfaction of the three basic psychological needs (Moreno-Murcia & Conte, 2011), supported by the finding of our study by this relationship with the task-involving climate perceived. Although, it is very important to note that the results may be different between boys and girls in these relationships, as indicated by Gómez-Baya et al. (2018), the finding that the values of competence and autonomy were higher in boys with no differences in girls, is important as well. In the present research, it was observed how, indeed, autonomy and competence were higher in boys, and, on the other hand, relatedness was higher in girls. It is therefore necessary to differentiate between the three psychological needs, given that, as Chen et al. (2019) indicate, the relationships with competence and autonomy seem to be clear, but they are not completely delimited with respect to relatedness.

Our results show that statistically significant differences were found between the satisfaction of basic psychological needs and the fear of failure, especially in older players and in the psychological needs of competence and relationship with others. In relation to sex, the results show that there are statistically significant differences between both psychological variables, especially in boys, highlighting the psychological needs of competence and relationship with others, which are related to all the aversive causes of fear of failure. No other studies have been found that have analyzed both aspects in the field of sports, but an investigation was found in the physical education classroom environment. The study by Gómez-López et al. (2021) confirmed that the students' perception of autonomy was related to a lower fear of losing the interest of others, while the perception of competence and the relationship with others was related to all aversive causes of fear of failure.

The second hypothesis proposed that girls would have a lower ego-involving climate and a higher task-involving climate, resulting in a lower fear of failure. In this sense, we corroborate the hypothesis as the study of Vazou et al. (2006) and unlike other studies that saw a lower fear of failure and/or a higher task-involving climate in boys, both in the sport context. This is noteworthy since for all fear-related variables (except experiencing shame), the values in our research were

higher in boys. It is possible that this is due to the higher values in the ego-involving climate, taking into account the relationship between the ego-involving climate and fear of failure. This aspect is noteworthy since it seems that studies identify a higher ego-involving climate in boys (Gómez-López et al., 2019a) but in turn, as mentioned, they also have a lower fear of failure. This seems not to correspond with the positive correlation between both variables, making it necessary to expand and deepen further studies. Considering, however, that the fear of failure can have many negative consequences in the psychological field and sports performance (Gómez-López et al., 2019c; Sagar et al., 2009), it is advisible to measure and control for it in order to ensure optimal results in sport and adherence. Finally, it should be noted that other research has not found differences according to sex (Galván et al., 2013; Møllerløkken et al., 2017), therefore, it is a matter that remains to be investigated in order to reach accurate conclusions.

Finally, the third hypothesis proposed that younger athletes would have a higher task-involving climate and a lower ego-involving climate, thus having a higher satisfaction of their basic psychological needs and a lower fear of failure. However, our study found no significant differences in the variables, only in the task-involving climate, which was higher in young people. This is similar to the study by Vazou et al. (2006) with athletes between 12 and 17 years old where no differences were found. However, this author's study (Vazou, 2010) found years later that, if there were differences, it was that the older the age the higher the levels of ego-involving and the lower the task-involving climate, which partly corroborates our hypothesis again. Regarding the satisfaction of basic psychological needs, we found no differences in age, which contrasts with various investigations. Thus, Vieira

et al. (2020) found that in basketball players, younger participants had a higher satisfaction of their basic psychological needs. The opposite occurs in the research of Parra-Plaza et al. (2018) with about 700 athletes, where the needs for autonomy and competence increased over the years, with no differences in that of relatedness.

The main limitations of our study are the age of the sample, given that in order to analyze the differences according to the category more differentiated samples could have been included (e.g., juniors or children) with questionnaires adapted to them. Moreover, the cross-sectional nature of the study makes it impossible to establish a causal relationship between the variables analyzed. Furthermore, we could have considered analyzing the motivation of athletes in terms of their relationship with basic psychological needs, following the Self-Determination Theory (Deci & Ryan, 2000).

As future lines of research, we suggest extending the study sample to other sports, for example, contemplating individual sports to analyze the contrast between the two. In addition, to know the role of the coach as a fundamental element due to its relationship with the perception of autonomy and fear of failure in athletes in training (Conroy & Coatsworth, 2007) is considered fundamental to understanding the underlying mechanisms. Finally, the use of instruments such as interviews to carry out a qualitative and quantitative analysis at the same time may be indicated, even knowing the opinion of the coaches in order to assess their response in relation to the athletes.

Conclusions

We conclude that athletes who have a greater task-involving climate are those who in turn have a greater ability to resist the fear

of failure and a greater satisfaction of basic psychological needs, especially the need for relatedness.

On the other hand, differentiating according to gender, girls have a greater task-involving climate, which also translates into a lower fear of failure, with this result having special relevance for coaches to promote a greater climate towards the task with its implications. It is important to highlight the consistency of the results through age, which concludes that the tendencies of the responses under the influence of the different motivational climates remain stable regardless of the sporting situations. Such circumstances are conditions that predispose athletes and should be taken into account by coaches in order to regulate their efforts to create the most appropriate motivational climates.

Finally, it is necessary to deepen research on the differences according to the educational stage, taking into account more extreme age values, such as the juvenile or infantile stage, which would correspond to the end of Primary Education and the beginning of Secondary Education, contrasting it with adult athletes or those finishing their formative stage.

Authors' ORCID

Alfonso Valero-Valenzuela
https://orcid.org/0000-0002-4317-1665
Manuel Gómez-López
https://orcid.org/0000-0002-4595-3994
Juan González-Hernández
https://orcid.org/0000-0002-6640-0352
David Manzano Sánchez
https://orcid.org/0000-0003-2155-4515

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