



THE INTERPLAY OF ANXIETY, COMMITMENT, ADDICTION, MOTIVATION, AND PERCEPTIONS OF SUCCESS IN ROAD RUNNERS

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Abstract

In sports, to study the dimensions of anxiety that involved in individual developing has become one of the key topics of the psychology of sport and exercise. The aim was to find out what had predictive relationships pre-competitive anxiety about the commitment to run, run negative addiction, motivations and perceptions of success in road races. Participants 1795 runners en route (1105 Spaniards, Mexicans 690). Of these, 85.65% were men aged $M = 38.98$ ($SD = 10.45$) and 14.35% female, aged $M = 37.88$ ($SD = 9.8$). Data collection was conducted by adaptations to the Castilian Revised Competitive State Anxiety Inventory-2 (CSAI-2R), the Commitment to Running Scale-11 (CR-11), the Running Addiction Scale-8 (RAS-8) Motivations of Marathoners Scales Scales-34 (MOMS-34) questionnaire and Perception of Success Questionnaire (POSQ). Moderate levels of cognitive and somatic anxiety in both men and women and Spaniards and Mexicans were obtained; Also high values in confidence, significantly higher in men versus women and Mexicans with respect to Spanish. With slight differences by sex and country, anxiety could predict score higher in the less desirable psychological constructs analyzed (addiction, extrinsic motivation and guidance to ego), while self-confidence was the reverse, that is, by value in as far as the most desirable psychological constructs (commitment and more self-determined motivation).

Keywords: anxiety; commitment; addiction; motivation; perception of success

Introduction

Practicing sports regularly and appropriate to the physical state and age of each person entails a long series of health benefits, whether on a physical, aesthetic or psychological level, which are collected in a multitude of research; The World Health Organization itself recognizes and details them (WHO, 2010), making a series of recommendations in this regard.

However, there is a factor that can condition performance in sport, precompetitive anxiety (Anshel, 1995; Gutiérrez, Estévez, García, & Pérez, 1997; Pozo, 2007; Smith, 1989), since the possibility of not achieving Its objectives generate an uncertainty in competitors that Anshel et al. (1991, p. 9) defined it as: "a subjective feeling of apprehension or perceived threat, sometimes accompanied by an increase in physiological arousal."

Currently, in the study of precompetitive anxiety, three dimensions are considered: cognitive anxiety, somatic anxiety and self-confidence (Andrade, Lois, & Arce, 2007; Cox, Martens, & Russel, 2003). Cognitive anxiety evaluates the negative feelings that the subject has about their performance and the consequences of the result. Somatic anxiety refers to the perception of physiological indicators of anxiety, such as muscle tension, increased heart rate, sweating, and stomach discomfort. Self-confidence estimates the degree of security that the subject believes they have about their chances of success in the competition, and is not a direct measure of anxiety, but the absence of it is an indicator that the athlete may experience cognitive anxiety. On the contrary, The two anxiety states correlate positively with each other and negatively with self-confidence (Buceta, López, Pérez-Llantada, Vallejo, & Del Pino, 2003;

Cervelló, Santos-Rosa, Jiménez, Nerea, & García, 2002) and, although the Men normally show greater self-confidence than women (Ruiz-Juan & Zarauz, 2014; Zarauz & Ruiz-Juan, 2013a), they are the ones who control their anxiety better (Ponce de León, López, & Medina, 2006). Age has shown a positive relationship with self-confidence and a negative relationship with somatic anxiety (Arbinaga & Caracuel, 2005; Hernández, Olmedilla, & Ortega, 2008; Zarauz & Ruiz-Juan, 2013a).

Aside from sex and age, there are multiple factors that can influence the degree to which the symptoms and dimensions of precompetitive anxiety manifest, from the type and characteristics of the sport in which one competes (Jaenes, 2000; Martens, Burton, Vealey, Bump, & Smith, 1990), to the environment in which the competition takes place (Arbinaga & Caracuel, 2005) and the level of the competition (León-Prados, Fuentes, & Calco, 2011; Pozo, 2007). The personal characteristics of each athlete may also influence, such as the experience they have in competition (Mellalieu, Hanton, & O'Brien, 2004), the perception of their degree of preparation for a competition (Gutiérrez et al., 1997) and their training habits (Zarauz & Ruiz-Juan, 2013b).

In the same way, there are also various psychological constructs that, depending on the degree to which they manifest in each athlete, can cause their precompetitive anxiety to increase or decrease significantly. Thus, focusing on the degree of commitment to their sporting activity, Leedy (2000) concluded that endurance runners who showed a greater degree of dedication to their training and competition had lower levels of anxiety and depression than recreational runners. However, Zarauz and Ruiz-Juan (2014) warned that the negative dimensions of training addiction were predictors of cognitive and somatic anxiety in Spanish male veteran athletes. Furthermore, in that same

population, Ruiz-Juan, Zarauz and Arbinaga (2013) had already obtained positive correlations between training addiction and cognitive and somatic anxiety. However, Bueno, Capdevila and Fernández-Castro (2002) concluded that runners who showed greater self-confidence before the competition were more likely to achieve their goals. On the contrary, in those who showed greater cognitive anxiety, these probabilities were lower. Regarding somatic anxiety, they concluded that it was not too important, since it largely disappeared once the competition started. in those who showed greater cognitive anxiety, these odds were lower. Regarding somatic anxiety, they concluded that it was not too important, since it largely disappeared once the competition started. in those who showed greater cognitive anxiety, these odds were lower. Regarding somatic anxiety, they concluded that it was not too important, since it largely disappeared once the competition started.

When analyzing the relationships of anxiety with motivations, focusing on self-determination theory, Cecchini, González and Contreras (2004), in a sample of adolescent athletes, found that self-confidence was associated with intrinsic motivations, while the two Anxiety states were associated with extrinsic ones. In turn, from the perspective of achievement goal theory, these authors concluded that self-confidence is associated with task orientation, and the two states of anxiety are associated with ego orientation in these young athletes. However, López (2011) found a high positive correlation between levels of anxiety and extrinsic motivation in elite cheerleaders, but no significant results in training cheerleaders. Recently, Zarauz and Ruiz-Juan (2014) concluded that in male veteran athletes, cognitive anxiety could be predicted by scoring high on amotivation and ego orientation, while in women it was somatic anxiety that could be predicted by scoring high on amotivation. In

the veterans, in addition, self-confidence could be predicted by scoring low in intrinsic motivation.

Regarding the perception of success in sport, Zarauz and Ruiz-Juan (2013c) concluded that greater cognitive and somatic anxiety could be predicted by high levels of ego orientation in Spanish veteran athletes. Similar results were obtained by Voigh, Callaghan and Ryska (2000) in young volleyball players. In tennis players, Cervelló et al. (2002) obtained that dispositional ego orientation was shown to be a significant and negative predictor of cognitive anxiety, and dispositional task orientation positively predicted self-confidence. For their part, Salinero, Ruiz and Sánchez (2006) found that, in karate fighters, task orientation correlated with anxiety. In soccer players, García-Mas et al. (2011) found a positive and significant correlation between dispositional ego orientation and cognitive anxiety; while Olmedilla, Andreu, Ortín and Blas (2009) obtained it as negative and significant between dispositional task orientation and trait anxiety. All these data show that depending on the sport that is practiced, the perception of the success of its practitioners will influence their anxiety in one way or another.

In any case, in most of these studies, except for some carried out with marathon runners and athletes, the samples used for the analysis of precompetitive anxiety were not very large. Therefore, the objective of this research was to analyze the levels of precompetitive anxiety and its prediction by different psychological constructs in a large sample of long-distance road runners. To do this, we started from the hypothesis that runners of both sexes had moderate pre-competitive anxiety (cognitive and somatic) and high self-confidence. Likewise, solid predictive models of said constructs were going to be obtained, expecting differences between sexes. Thus, with some differences between sexes, anxiety

could be predicted by scoring high in negative addiction to running, in less self-determined motivations and ego orientation. On the contrary, self-confidence could be predicted by scoring high on commitment to running, more self-determined motivations, and task orientation.

Method

Participants

The starting point was the total number of runners registered in the half marathons of Almería and Elche (Spain) and Guadalajara (Mexico), in 2010. To ensure that the sample was representative of the total of these races (error $\pm 3\%$, confidence interval 95.5%).), a stratified sampling design by proportional allocation was used, taking into account sex (86.65% of men and 13.35% of women) and age. A questionnaire was administered to 1,054 long-distance road runners who participated in the half marathons of Almería (01/30/2011), Elche (04/03/2011) and two editions of Guadalajara (02/20/2011; 19/ 02/2012).

In addition, through a website, voluntary responses were obtained from 741 questionnaires from marathon and half marathon runners from 03/01/11 to 03/20/13. Therefore, combining the random and voluntary samples, a total sample of 1,795 (1,105 Spanish, 690 Mexican) long-distance road runners was obtained, which was composed of 1,541 men (85.65%) with an age range of 18 to 76. years ($M = 38.98$; $SD = 10.45$) and 254 women (14.35%) with an age range of 18 to 69 years ($M = 37.88$; $SD = 9.8$).

Procedure

In the races mentioned above, permission was requested from the race organization by means of a letter explaining the objectives of the research, the way in which the study was going to be carried out, and a model of the instrument was accompanied. The questionnaire was administered at

a *stand* that was set up for this purpose during the collection of bib numbers from the participating athletes the day before the race.

To expand the sample and obtain the largest and most varied geographically in the Spanish territory, collaboration was requested from the webmaster of the main athletics forum in Spain, who was asked to publish the questionnaire in the road runners section.

In both cases, all subjects were informed of the objective of the study, of the voluntariness, absolute confidentiality of the responses and data management, of the fact that there were no right or wrong answers and they were asked to answer with the utmost sincerity and honesty. Furthermore, if they had previously answered this questionnaire, they were asked not to do it again. This work has a favorable report from the Bioethics Commission of the University of Murcia.

Instruments

- *Competitive Anxiety Inventory-2 Revised*; Spanish version by Andrade et al. (2007) from the *Revised Competitive State Anxiety Inventory-2* (CSAI-2R) by Cox et al. (2003). It has 3 subscales: cognitive anxiety, somatic anxiety and self-confidence. The first and third contain 5 items scored from 1 (*not at all*) to 4 (*a lot*) , which gives a total score between 5 and 20. The second contains 6 items, which offers scores between 6 and 24.
- *Commitment to Running Scale-11* (CR-11) by Ruiz-Juan and Zarauz (2011a); Spanish version of the *Commitment to Running Scale* (CR) by Carmack and Martens (1979). It contains 11 items to measure commitment to running (CC) scored from 1 (*do not agree at all*) to 5 (*completely agree*), which gives a total score between 11 (minimum CC) and 55 (maximum CC).

- *Running Addiction Scale-8 (RAS-8)* by Zarauz and Ruiz-Juan (2011a); Spanish version of the *Running Addiction Scale (RAS)* by Chapman and De Castro (1990). It contains 8 items to measure negative addiction to running (ANC) that are scored from 1 (*not at all agree*) to 7 (*totally agree*), which gives a total score between 8 (minimum ANC) and 56 (maximum ANC).).
- *Motivations of Marathoners Scales-34 (MOMS-34)* by Ruiz-Juan and Zarauz (2011b); Spanish version of the *Motivations of Marathoners Scales (MOMS)* by Masters, Ogles and Jolton (1993). It contains 7 scales with 34 items that evaluate the reasons for and the degree of motivational orientation to run: health orientation, weight, exceeding personal goals and competition, recognition, affiliation, psychological goal and meaning of life and self-esteem. The responses are collected on a Likert-type scale from 1 (*it is not a reason to run*) to 7 (*it is a very important reason to run*), with an average total score on each scale between 1 (*minimum motivation to run*) and 7 (*maximum motivation to run*).
- *Perception of Success Questionnaire*; Spanish version by Cervelló (1996) of the *Perception of Success Questionnaire (POSQ)* by Roberts and Balagué (1991). It was developed to measure the orientation of achievement goals in the sports context. It consists of 12 items, 6 on *Task* orientation and 6 on *Ego*. The initial question that heads the questionnaire is "I feel successful in sport when...". Responses are collected on a Likert-type scale that ranges from *completely disagree* (1) to *completely agree* (5).

Data analysis

Correlation between the subscales (Pearson coefficient), internal consistency (Cronbach's alpha), mean differences by country and sex (Student t) and multivariate linear regression were performed with SPSS 20.0.

Results

Descriptive statistics and correlation

Both Spanish and Mexican long-distance road runners present average values in precompetitive anxiety (cognitive and somatic), being slightly higher in the Spanish. However, the self-confidence values are high in the Spanish sample and very high in the Mexican sample. Men in both countries present significantly higher values than women in self-confidence, with no significant differences by sex being found in the other two variables ([Table 1](#)).

TABLA 1

*Coeficiente alfa, media, desviación típica, t y significación para ansiedad precompetitiva (CSAI-2R).
Diferencias por sexos y países*

	España							México						
	Hombres n=1007		Mujeres n=98		t	p	d	Hombres n=534		Mujeres n=156		t	p	d
	α	M \pm DE	α	M \pm DE				α	M \pm DE	α	M \pm DE			
CSAI-2R	0.78		0.72					0.78		0.74				
Ansiedad cognitiva	0.77	1.99 \pm 0.67	0.76	2.1 \pm 0.73	-1.56	0.119	-0.15	0.71	1.95 \pm 0.74	0.73	1.94 \pm 0.77	0.18	0.853	0.01
Ansiedad somática	0.84	2.25 \pm 0.72	0.79	2.37 \pm 0.72	-1.59	0.111	-0.16	0.78	2.18 \pm 0.78	0.77	2.19 \pm 0.77	-0.13	0.894	-0.01
Autocon- fianza	0.79	3.14 \pm 0.58	0.85	3 \pm 0.71	2.2	0.028	0.21	0.72	3.56 \pm 0.56	0.74	3.45 \pm 0.63	2.06	0.039	0.18

Fuente: elaboración propia

Table [2](#) reflects the calculated correlations. The correlations between cognitive and somatic anxiety are moderate and positive, while those with self-confidence are low and negative, in both countries and both sexes.

TABLA 2
Correlaciones entre las subescalas de CSAI-2R, según sexo y países

	Ansiedad cognitiva				Ansiedad somática				Autoconfianza			
	España		México		España		México		España		México	
	Hombres n=1007	Mujeres N=98	Hombres n=534	Mujeres n=156	Hombres n=1007	Mujeres n=98	Hombres n=534	Mujeres n=156	Hombres n=1007	Mujeres N=98	Hombres n=534	Mujeres n=156
Ansiedad cognitiva	1	1	1	1	0.57(**)	0.54(**)	0.62(**)	0.63(**)	-0.14(**)	-0.3(**)	-0.14(**)	-0.19(*)
Ansiedad somática	0.57(**)	0.54(**)	0.62(**)	0.63(**)	1	1	1	1	-0.13(**)	-0.22(*)	-0.08(*)	-0.15(*)
Autoconfianza	-0.14(**)	-0.3(**)	-0.14(**)	-0.19(*)	-0.13(**)	-0.22(*)	-0.08(*)	-0.15(*)	1	1	1	1

*(p < 0.05), ** (p < 0.01)
Fuente: elaboración propia

Multivariate regression analysis

A multivariate linear regression analysis was performed, trying to obtain models that explained as much of the variance as possible. The mean scores of precompetitive anxiety (cognitive anxiety, somatic anxiety and self-confidence) were taken as dependent variables. The predictor variables were ANC, CC, each of the motivation subscales (health orientation, weight, personal goals and competition, recognition, affiliation, psychological goals and meaning in life and self-esteem) and perception of success in sport (ego and task). Sex and country were considered as selection variables.

The R^2 value was extracted to explain the variance, Beta to explain the prediction between variables, F to see if there was a relationship between selected variables and its significance ([Table 3](#)). Robust models were obtained, as they explained between one third and two thirds of the variance in men and women from both countries.

TABLA 3

Análisis Regresivo Lineal Multivariado: modelos que predicen significativamente la ansiedad precompetitiva (CSAI-2R) en función de compromiso a correr (CR-11), adicción a correr (RAS-8), motivación (MOMS-34) y percepción de éxito en el deporte (POSQ) de los maratonianos por sexos y países

	Ansiedad cognitiva				Ansiedad somática				Autoconfianza			
	España		México		España		México		España		México	
	Hombres n=1007	Mujeres N=98	Hombres n=534	Mujeres n=156	Hombres n=1007	Mujeres n=98	Hombres n=534	Mujeres n=156	Hombres n=1007	Mujeres N=98	Hombres n=534	Mujeres n=156
	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign	BetaSign
RAS-8 (ANC)	0.07**	-0.01	0.12*	-0.11	0.04	0.06	-0.07	-0.09	-0.06	-0.05	-0.01	-0.07
CR-11 (CC)	-0.06*	-0.18	-0.2***	-0.21*	-0.1***	-0.2*	-0.1*	-0.23**	0.08**	0	0.23***	0.13
MOMS-34												
Orientación a la salud	-0	-0.13	-0.05	-0.07	-0.01	-0.15	0.03	-0.16	0.01	0.15	0.06	0.07
Reto	0.01	0.19	0.04	0.02	0.06	0.21	0.01	0.06	-0.08**	0.04	-0.11*	-0.07
Metas personales-Competición	0.16***	0.27*	0.13*	0.25*	0.07*	0.19	0.1*	0.14	0.28*	-0.22	0.1*	0.1
Reconocimiento	0.32***	0.13	0.22***	-0.07	0.08*	-0.06	0.12*	-0.1	-0.14***	-0.22	-0.12*	-0.06
Afiliación	-0.26	-0.36***	0.04	-0.19*	0.05	-0.19*	-0.02	-0.2*	0.07	0.3*	-0.04	0.25*
Metas psicológicas	-0.24	0.09	-0.04	-0.04	0.06	-0.01	0.04	0.09	0	0.01	-0.03	-0.1
Significado de la vida-Autoestima	-0.01	0.1	0.02	0.12	-0	0.33**	0.02	0.25*	0.22***	0.21	0.16**	0.13
POSQ												
Ego	0.18***	0.25*	0.13*	0.29*	0.23*	0.22*	0.21**	0.31**	0.09	0.08	-0.04	-0.04
Tarea	0.1*	0.27*	-0.02	-0.14	-0.02	-0.08	-0.06	-0.17	0.01	0.11	0.28***	0.26**
	R ² =0.550 F=30.174	R ² =0.570 F=3.65	R ² =0.461 F=12.828	R ² =0.406 F=2.572	R ² =0.382 F=15.485	R ² =0.393 F=1.428	R ² =0.366 F=2.361	R ² =0.409 F=2.637	R ² =0.333 F=11.4	R ² =0.494 F=2.529	R ² =0.487 F=14.743	R ² =0.438 F=3.116

* (p < 0.05), ** (p < 0.01), *** (p < 0.001).

Fuente: elaboración propia

The pattern of cognitive anxiety, in men from both countries, was almost identical. It could be significantly predicted by scoring high in ANC, personal goals and competition, recognition, ego and task (only in Spain) and by scoring low in CC (variance: 55% Spain; 46.1% Mexico). The model for women in both countries was also very similar, but with important differences with men. The prediction was by scoring high on personal goals and competition, ego and task (only in Spain) and by scoring low on CC and affiliation (variance: 57% Spain; 40.6% Mexico).

The model of somatic anxiety, in men from both countries, was the same. It could be significantly predicted by scoring high in personal goals-competition, recognition and ego, and by scoring low in CC (variance: 38.2% Spain; 36.6% Mexico). The model in women from both countries was also identical, but with important differences with men. The prediction was by scoring high in meaning of life-self-esteem and ego, and by scoring low in CC and affiliation (variance: 39.3% Spain; 40.9% Mexico).

Spanish and Mexican men presented an almost identical model in self-confidence since this could be predicted by scoring high in CC, personal goals-

competition, meaning of life-self-esteem and task (only in Mexico) (variance: 33.3% Spain; 48.7 % Mexico). The model of Spanish and Mexican women was almost the same and significantly different from that of men, since it was predicted by scoring high in affiliation and task (only in Mexico) (variance: 49.4% Spain; 43.8% Mexico).

Discussion

As expected, the levels obtained in the two anxiety states have been moderate, both in men and women and in Spaniards and Mexicans. The explanation may be multiple, since, on the one hand, this type of tests take place outside a sports venue, normally through the most beautiful or emblematic streets and places of a city, which significantly reduces precompetitive anxiety in the runners (Jaenes , 2000; Martens et al., 1990). On the other hand, they do not feel the close negative pressure of thousands of spectators concentrated in a small space, but, on the contrary, they are spread evenly along the entire route to continually encourage them, which moderates their anxiety (Arbinaga & Caracuel, 2005). In the same way, With the exception of large international and competitive events, these races have a purely popular and participatory nature, where the majority of athletes run in groups of friends encouraging each other, which again reduces the pressure they may feel (León-Prados et al. al., 2011; Pozo, 2007). Also, as Ruiz-Juan and Zarauz (2012) explained, the majority of these athletes have many years of experience training and competing in these races, which also moderates the anxiety symptoms they may suffer (Mellalieu et al., 2004).).

As for the high values obtained in self-confidence, apart from the reasons presented so far that moderate their anxiety and increase their self-confidence, they can be significantly increased by the training habits of these athletes, since not only do they have many years of experience training and competing, but

they also do so for an average of almost five days a week (Ruiz-Juan & Zarauz, 2012), which increases their feeling of being adequately prepared for the competition and, therefore, their self-confidence (Gutiérrez et al. ., 1997). Furthermore, the participation of underage athletes is prohibited in these long-distance races, with the majority of runners being of adult or mature age (Ruiz-Juan & Zarauz, 2014), which also favors greater self-confidence (Arbinaga & Caracuel, 2005; Hernández et al., 2008; Zarauz & Ruiz-Juan, 2013a).

The significant differences by sex obtained in favor of men in terms of their degree of self-confidence were expected, since they were already obtained recently in similar populations of athletes (Ruiz-Juan & Zarauz, 2014; Zarauz & Ruiz-Juan, 2013a). . However, the fact that Mexicans have obtained significantly higher values than Spaniards in self-confidence could be due to cultural differences and the way in which both nationalities understand this sport.

On the other hand, the positive correlations of the two anxiety states with each other and negative correlations with self-confidence only confirm everything found in previous studies (Buceta et al., 2003; Cervelló et al., 2002; Ruiz-Juan et al., 2013), so an attempt will be made to explain the dimensions of anxiety and self-confidence by sex and country to the findings obtained in the predictive models.

Thus, the low scores obtained in their healthy and desirable commitment to their sports practice are not only predictors of a higher level in the two states of anxiety, as was already obtained in various previous investigations (Leedy, 2000; Ruiz-Juan et al. ., 2013; Zarauz & Ruiz-Juan, 2014), but high scores in said CC also predict greater self-confidence in men in both countries. It seems



clear that the higher the CC of these athletes, the greater the feeling of being adequately prepared for the competition and, therefore, the greater their self-confidence, as already explained by Gutiérrez et al. (1997).

However, considering the ANC, it was found that high scores in this construct are predictors of the cognitive dimension of anxiety in men of both nationalities. This is logical, since the symptoms of ANC appear in those runners who train more days a week than in those who simply have a healthy commitment to their sporting activity (Zarauz & Ruiz-Juan, 2011b), generating in runners addicts have a feeling of being much better prepared and have much higher expectations of success than in those who are committed, which increases their cognitive anxiety regarding the latter (Gutiérrez et al., 1997).

Regarding the motivations of long-distance road runners, it was found that less self-determined motivations (overcoming personal goals-competition and recognition) have been a clear predictor of the two dimensions of anxiety in both sexes and countries, such as already occurred in other populations of athletes (Cecchini et al., 2004; López, 2011). Furthermore, the most extrinsic of male runners' motivations, recognition, has also been found to be a negative predictor of self-confidence. This can be explained because the runners who are motivated by these two motivations are normally very addicted, since they do more kilometers and training days per week than the rest (Zarauz & Ruiz-Juan, 2012), which creates in them high expectations of success which, in turn,

Now considering the more self-determined motivations, affiliation turned out to be a negative predictor of cognitive and somatic anxiety and a positive predictor of self-confidence for all runners. The fact that it happens only in women could be because men normally have a much higher ANC than women (Ruiz-Juan & Zarauz, 2012), so they are more concerned about training more days, more

hours and more kilometers. the week, looking for a coach, but no friends to run with. Furthermore, Zarauz and Ruiz-Juan (2012) explained that those runners who are especially motivated by membership do not have a high ANC or even a high commitment to their sports practice, so their main objective is to spend pleasant times running in the company of friends, hence his moderate anxiety and high self-confidence.

For its part, the most self-determined motivation of these runners, meaning of life-self-esteem, has turned out to be a significant predictor of self-confidence in men and somatic anxiety in women, which once again highlights the differences. by sex already found in these constructs in this population (Ruiz-Juan & Zarauz, 2014). Normally, marathoners with high scores in this motivation also value recognition highly, they are very addicted to running and men do more kilometers than women (Zarauz & Ruiz-Juan, 2012). This produces greater self-confidence in them and, in them, due to the feeling of being less prepared for the competition, greater somatic anxiety (Gutiérrez et al., 1997).

Regarding the perception of success, the ego orientation of runners from both countries and sexes seems to be confirmed as a solid predictor of the two states of anxiety, as occurred in the majority of studies in other populations of athletes (Cervelló et al. ., 2002; García-Más et al., 2011; Voigh et al., 2000; Zarauz & Ruiz-Juan, 2013c). This result is explained because, in addition to ego orientation, less self-determined motivations (recognition and personal goals-competition) also turned out to be predictors of cognitive and somatic anxiety. However, what was not expected was that task orientation would be a predictor of cognitive anxiety, in Spain, and in Mexico, of self-confidence,

which once again highlights the cultural differences in understanding this sport in both populations.

By way of conclusions, the hypothesis seems to be confirmed that, with slight differences by sex and country, anxiety can be predicted by scoring high in the least desirable psychological constructs analyzed (addiction, extrinsic motivations and ego orientation), while in Self-confidence is the other way around, that is, by valuing to a greater extent the most desirable psychological constructs (commitment and more self-determined motivations).

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