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## Bienestar psicológico a través del modelo PERMA y *burnout* en deportistas de élite: estudio transversal

### Psychological well-being through the PERMA-model and burnout in elite athletes: cross-sectional study

### Bem-estar psicológico através do modelo PERMA e burnout em atletas de elite: estudo transversal

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#### RESUMEN

Este estudio analiza el bienestar psicológico basándose en el modelo PERMA y la sintomatología del burnout en deportistas de élite. Cuarenta y seis deportistas brasileños de élite fueron evaluados con PERMA-Profiler y el *Athlete Burnout Questionnaire*. Los resultados muestran un alto nivel de bienestar percibido por los propios participantes (puntuación media 8.2/10) independientemente del sexo y la edad. La dimensión de bienestar con menor puntaje fue Logro, mientras que la más fuerte fue Significado. En cuanto a las dimensiones del *burnout*, el agotamiento fue la sintomatología más prevalente, seguida de la reducción de la sensación de logro y la devaluación de la práctica deportiva. No se encontraron diferencias estadísticamente significativas en cuanto a sexo ni edad. Se encontró una correlación negativa ( $r = -0.21$ ) entre bienestar y burnout, aunque los datos no alcanzaron significación estadística. La única dimensión del modelo PERMA que explicó significativamente el *burnout* de los deportistas fueron las emociones negativas ( $R^2 = 0.064$ ). La dimensión de logros (del modelo PERMA) también explicó el 22.6% de la dimensión de *burnout* sentido reducido de logro ( $R^2 = 0.226$ ). En resumen, nuestros atletas de élite reducen su bienestar cuando se reduce la sensación de logro, y sus síntomas de agotamiento aumentan a medida que aumentan las emociones negativas.

**Palabras clave:** *burnout*, bienestar psicológico, PERMA, psicología positiva, deporte de élite.

#### ABSTRACT

This study analyses the psychological well-being based on the PERMA model and the burnout symptomatology of elite athletes. Forty-six Brazilian elite athletes were evaluated with PERMA-Profiler and the Athlete Burnout Questionnaire. The results show a high level of self-reported perceived well-being (mean score 8.2/10) regardless of sex and age. The well-being dimension with the lowest score was Achievement, while the strongest was Meaning. Regarding burnout dimensions, exhaustion was the most prevalent symptomatology, followed by reduced sense of achievement and devaluation of sports practice. No statistically significant differences were found regarding sex or age. A negative correlation ( $r = -0.21$ ) was found between well-being and burnout, although data did not reach statistical significance. The only dimension of the PERMA model that significantly explained the

burnout of athletes was negative emotions ( $R^2 = 0.064$ ). Achievement (from PERMA) also explained 22.6% of the reduced sense of achievement burnout dimension ( $R^2 = 0.226$ ). In short, our elite athletes reduce their well-being when feelings of achievement are reduced, and their burnout symptoms increase as negative emotions increase.

**Keywords:** burnout, psychological well-being, PERMA, positive psychology, elite sport.

## RESUMO

Este estudo analisa o bem-estar psicológico com base no modelo PERMA e a sintomatologia de burnout em atletas de elite. Quarenta e seis atletas de elite brasileiros foram avaliados com o PERMA-Profiler e o Athlete Burnout Questionnaire. Os resultados mostram um alto nível de bem-estar percebido autorreferido (pontuação média 8,2/10) independentemente do sexo e da idade. A dimensão de bem-estar com pontuação mais baixa foi Realização, enquanto a mais forte foi Significado. Relativamente às dimensões do burnout, a exaustão foi a sintomatologia mais prevalente, seguida da redução do sentimento de realização e da desvalorização da prática desportiva. Não foram encontradas diferenças estatisticamente significativas em relação ao sexo ou à idade. Foi encontrada uma correlação negativa ( $r = -0.21$ ) entre bem-estar e burnout, embora os dados não tenham alcançado significância estatística. A única dimensão do modelo PERMA que explicou significativamente o burnout dos atletas foram as emoções negativas ( $R^2 = 0.064$ ). O desempenho (do PERMA) também explicou 22.6% da redução da dimensão de burnout no sentido de realização ( $R^2 = 0.226$ ). Em suma, os nossos atletas de elite reduzem o seu bem-estar quando os sentimentos de realização são reduzidos, e os seus sintomas de esgotamento aumentam à medida que as emoções negativas aumentam.

**Palavras chave:** *burnout*, bem-estar psicológico, PERMA, psicologia positiva, desporto de elite.

## INTRODUCTION

Sports participation provides unquestionable benefits for people's health and well-being; however, in the case of the elite, different psychological disorders appear with greater incidence than in the normal population. Specifically, there is a higher prevalence of mental health disorders in elite athletes (Poucher et al. 2021), being this prevalence of 41% versus 9% in the normal population (Palay et al., 2019). It has been described that the prevalence of eating disorders in elite athletes is up to 36%, (Perry et al., 2022), a fact related to body image disorders, low energy availability, fatigue, pain, and overtraining (Lichtenstein et al., 2022). The risk of depression is also higher in this group and has been established at around 10-11% (Kuettel et al., 2022); Similarly, it has been described a higher risk of injury, suicide, anxiety, sexual abuse, sleep disorders, ADHD, and comorbid diagnoses, among others (Chang et al., 2019). Even risky alcohol consumption habits are observed in elite athletes (Olive et al., 2022). The evidence based on the mental health and well-being of elite athletes demonstrates that this population is vulnerable to a variety of mental health problems such as burnout (Rice et al., 2016).

Following Félix-Mena et al. (2020) sports burnout refers to a syndrome caused by stress in their sporting activity (related to overtraining, external pressures or a feeling of stagnation), which generates emotional exhaustion and depersonalization in athletes, ending with feelings of reduced personal fulfilment. and decreased performance. In addition, it is related to mood disorders, tension, fatigue, lack of self-esteem, changes in behaviour, changes in social interactions, and negative reactions to daily stress, among others. Among the behavioral symptoms: lack of adherence to training and poor sports performance; as cognitive symptoms: devaluation of sports practice and ideas of abandoning sports; and as physiological symptoms: tension and physical exhaustion (García-Jarillo et al., 2020).

As commented by Madigan et al. (2019), burnout has a negative relationship with the well-being and health of athletes, and to prevent it, it is necessary to focus on the individual, on reducing stress, on promotion of autonomy, support and increasing coping strategies. Similarly, Nicholls et al. (2022) state that it is possible to associate burnout in athletes with reduced well-being. Likewise, Glandorf et al. (2023) present relevant evidence of the

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association of burnout in athletes with negative health outcomes, such as, for example, depression, anxiety, addictive behaviour, insomnia, worry, mood changes and image disorders.

On the other hand, for an understanding of well-being applicable to elite athletes, there is a need for a holistic vision that considers the global and specific aspects of well-being in sport (Lundqvist et al., 2014). Positive psychology seeks to promote and develop well-being, considering human flourishing as its greatest objective (Seligman, 2011). For these reasons, positive psychology develops an approach that focuses on strengths and not weaknesses, on health and not on illness and, in this way, promotes healthier people and/or contexts. Thus, positive psychology interventions are practices, methods, programs or models that, instead of repairing pathological circumstances, seek to improve emotions, behaviors and thoughts, with the aim of promoting well-being, individual and organizational strengths, optimism, happiness and creativity (Yeh & Barrington, 2023).

Psychological well-being has been the object of study in athletes (Hoare et al., 2022), but there are no previous studies that start from the analysis of the perception of well-being in elite athletes with the PERMA model (Seligman, 2011) as a conceptual framework of positive psychology (acronym of Positive Emotions, Engagement, Relationships, Meaning and Accomplishment).

The PERMA theoretical perspective views well-being as a multidimensional construct that contains both hedonic (i.e., seeking pleasure and enjoyment) and eudaimonic (i.e., living virtuously and functioning well) dimensions. The five elements that PERMA evaluates are: Positive emotions: the hedonic experiences of positivity, satisfaction and pleasure; Engagement: the experience of being in flow while losing track of time; Relationship: experiencing the care and love of others; Meaning: having a sense of purpose in the vine; and Achievement: the successes and achievements experienced in life (Heshmati et al., 2023).

The Perma-profiler has been used to evaluate working conditions and to health professionals, among others. Recently in association to burnout symptoms of internists (Tanaka et al., 2023). but there are no studies that use the Perma model to evaluate athletes and show us if this relationship exists and to what extent.

It is for all the above that the aim of this study was to understand the perceived psychological well-being and burnout symptomatology of elite athletes, analysing the relationship between constructs and evaluating which dimensions of the well-being according to the PERMA model could protect from burnout syndrome.

### METHOD

#### *Design*

This is a quantitative, cross-sectional, predictive and explanatory study (Ato et al., 2013).

#### *Participants*

Forty-six Brazilian elite athletes participating in training and competition, from different sports modalities, aged between 18 and 46 years ( $M = 28 \pm 7.35$ ) (Figure 1), 25 of whom were men (54.3% men) participated in this study. and 21 women (45.7% women). Most of the study participants are Jiu Jitsu athletes (17), but we also found Judo (7), CrossFit (4), among others.

70% of the participants began their sports performance before the age of 13, 2 of them reported having started at the age of 2. The majority of them practice their sport as a profession (40 athletes) and have been federated for an average of  $11 \pm 6.53$  years.

The type of sampling used in the study was non-probabilistic for convenience. The inclusion criteria of the participants were: having Brazilian nationality or understanding of the Portuguese language; age over 18 years; not have pathologies or use of medication that could interrupt the conclusion of the tests; and be federated with international experience in the main competitions of its sporting modality.

### *Instruments*

To collect data, three questionnaires were developed, applied online: the first was an ad hoc questionnaire in which sociodemographic data and sports data were asked, the second was the PERMA-Profilier adapted for the Brazilian context (de Carvalho et al., 2023) to assess perceived psychological well-being; and the latest Athlete Burnout Questionnaire, adapted for the Portuguese language, the Questionário de Burnout para Atletas (QBA) by Pires et al. (2006).

The PERMA-Profilier by Butler and Kern (2016) is a scale that aims to evaluate the five pillars of well-being proposed in the PERMA theory (Seligman, 2012): P- Positive Emotions, E- Engagement, R- Positive Relationships, Meaning, and Accomplishment. Positive Emotions refers to how pleasant and satisfying emotions are experienced, such as optimism, gratitude and mood. These emotions are important for well-being and have the potential to increase people's personal, intellectual, and social resources. Engagement involves being completely involved and committed to life. This includes having optimal experiences using personal strengths to successfully complete tasks in everyday life. Positive relationships are the pillar of well-being that deal with the ability to establish and experience healthy relationships in various areas of life. This includes empathy, the development of healthy social relationships, emotional bonds, and social intelligence. The Meaning or Sense is found in the identification and application of personal strengths to carry out activities that transcend the individual. This may involve selfless actions to benefit others, contribute to social well-being, and establish healthy relationships at different stages of development. Feelings of Achievement or accomplishment refer to achieving personal goals and objectives that have significant intrinsic value. It involves developing individual potential by striving for meaningful results in different areas of life and persevering despite challenges.

The instrument is composed of 23 Likert-type response items linked by different extremes, for example: always and never, terrible and excellent, not at all and completely. The internal consistency identified in the original scale was a Cronbach's Alpha of 0.94 for the total scale.

For the present study, the version adapted and translated for the Brazilian context by de Carvalho and Natividade (2023) was used. In our study, with elite athletes, the scale has an internal consistency (Cronbach's Alpha) of 0.63.

The last questionnaire applied was the adapted and translated version for Portuguese of the Athlete Burnout Questionnaire (ABQ) by Raedeke and Smith (2001). The ABQ is originally composed of 15 Likert-type items, with five alternatives: almost never (1), almost always (5), rarely (2), sometimes (3) and frequently (4). Each item evaluates the frequency of feelings related to burnout and to the constructs that define the syndrome: physical and emotional exhaustion, reduced sense of achievement, and sports devaluation. The results are assigned to each subscale, obtained from the sum of the responses given to the five items sum of the 15 items of the instrument. This presents Cronbach's Alpha of between 0.85 and 0.91 for each burnout subscale (Salazar-González et al. 2020).

The version translated and adapted for the Portuguese language is called the Burnout Questionnaire for Athletes (Pires et al., 2006), represented by the acronym QBA. The Cronbach's alpha reliability of the questionnaire is 0.79. In our study, with elite athletes, the scale remains with the same internal consistency: Cronbach's Alpha of 0.63.

The items corresponding to Emotional Exhaustion and Depersonalization are formulated in such a way that the greater the numerical response of the subject, the greater the burnout experienced; while the Reduced Personal Achievement items are formulated in the opposite direction: the lower the numerical response of the subject, the greater the degree of burnout experienced. Furthermore, there is an ambiguous zone, intermediate between P33 and P66 that, although it does not determine an exact level of burnout, marks a tendency or predisposition to suffer from it in the future and represents moderate burnout.

### *Procedure*

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To carry out this research, different sports institutions were contacted to enable the explanation of the research objectives. Next, prior to data collection, we carried out an online discussion, detailing the main characteristics of the work, so that potential participants could decide whether to participate or not, and express through informed consent their desire to participate or not. Subsequently, we disseminated the questionnaire and collected data. Its dissemination was carried out by one of the study researchers who made direct contact with athletes and sports institutions. Once interested, the athletes received three links to answer the questionnaires: the sociodemographic one, the PERMA-Profilier and the QBA. Participants voluntarily agreed to participate in the study, and informed consent was obtained in all cases. The study was carried out in accordance with Organic Law 3/2018, of December 5, on the Protection of Personal Data and guarantee of digital rights.

The study was carried out in accordance with the Declaration of Helsinki (World Medical Association, 2013), which establishes the fundamental ethical principles for research involving human subjects. This study was carried out in compliance with the Guidelines for Research Ethics in Sports and Exercise Sciences (Harriss et al., 2019). The procedure was approved by the Ethics Committee of the Catholic University of Murcia (CE072301).

### *Data analysis*

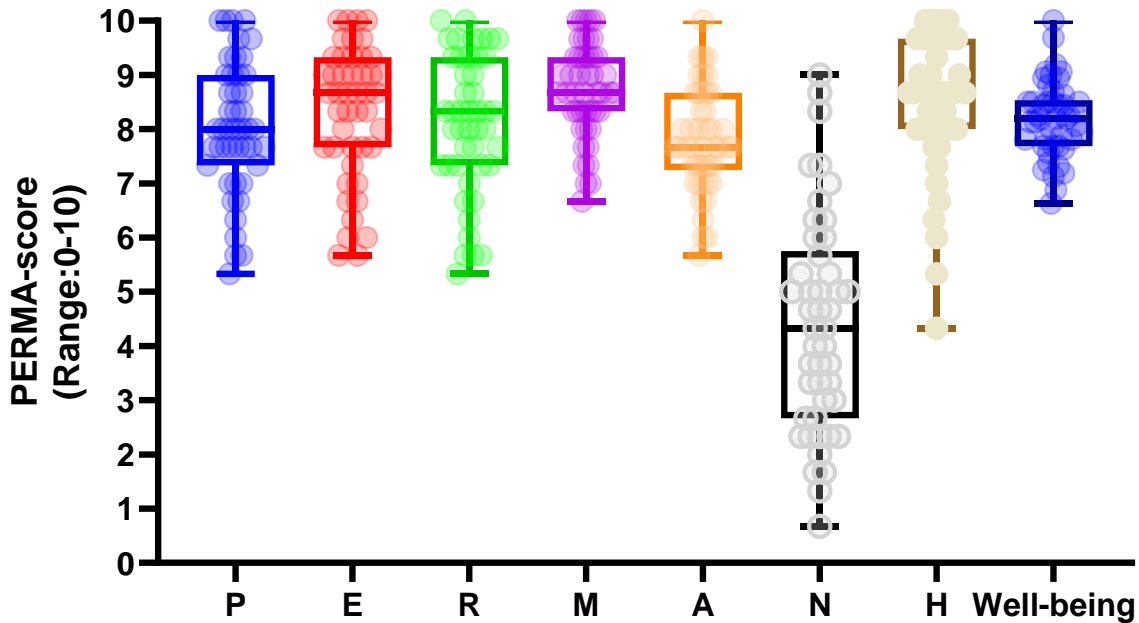
A cross-sectional observational study has been carried out. Normality was evaluated through the Kolmogorov-Smirnov test, obtaining a p-value  $> 0.200$  in all cases. In addition, kurtosis and asymmetry coefficients were determined, confirming the normal distribution of the present data. Therefore, parametric tests were carried out. Descriptive analyses and frequency studies have been carried out, as appropriate. Correlations between dimensions were analysed by means of Spearman's coefficients. In addition, regression analyses have been carried out establishing "Burnout" (result condition) as the dependent variable and the PERMA dimensions (causal conditions) as predictor variables. All analyses were carried out using the SPSS statistical program. v.28, and the significance level was established at  $p < .050$ .

## RESULTS

Overall, perceived well-being was of  $8.2 \pm 0.7$  (according to the 0-10 scale), with a range of 6.6-10.0. Figure 1 shows the distribution of the participants' well-being dimension scores. Meaning ( $8.7 \pm 0.9$ ) and Engagement ( $8.3 \pm 1.0$ ) dimensions showed the higher scores, while Accomplishment ( $7.8 \pm 1.0$ ) obtained the opposite. Although they are not included in the PERMA model, Negative emotion ( $4.4 \pm 2.0$ ) and health ( $8.4 \pm 1.3$ ), two dimensions of the PERMA profile, also showed scores indicative of high well-being (Figure 1).

Figure 1

PERMA Model Dimension Scores.



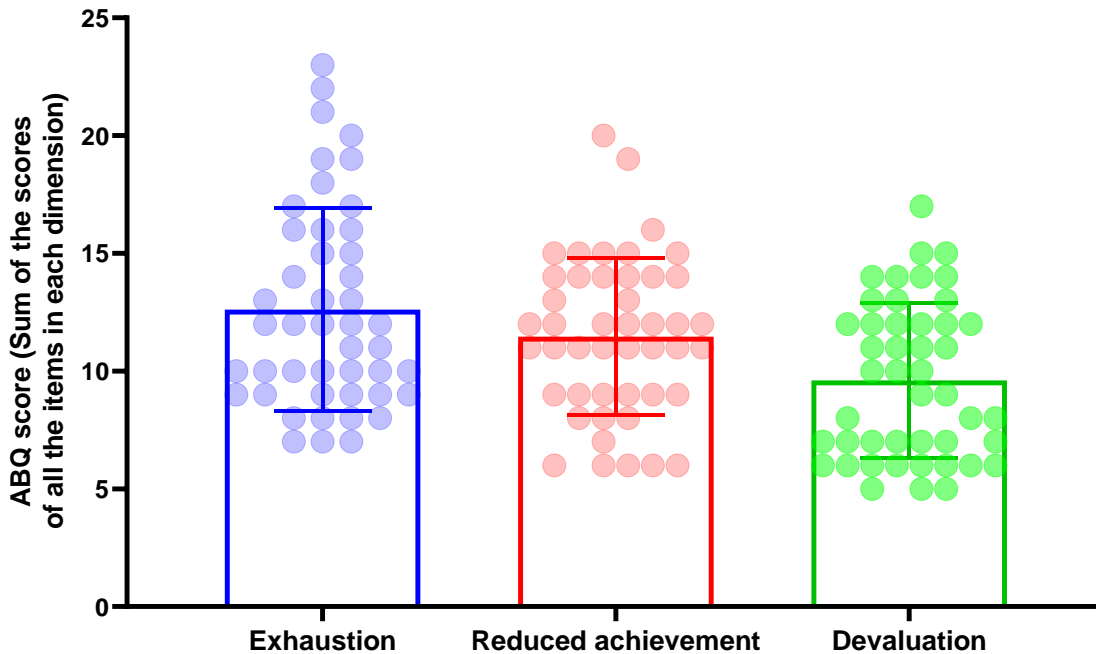
Note: The figure demonstrates the scores of the sample in the dimensions of the PERMA model. P: positive emotions, E: engagement, R: relationships, M: meaning, A: accomplishment, N: negative emotions, H: health. Well-being: Mean overall well-being score.

Regarding burnout dimensions, attending to the data obtained, it can be confirmed that the highest burnout symptomatology was physical and emotional exhaustion, followed by reduced sense of achievement, and sports devaluation (Figure 2).

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Figure 2

*Burnout Dimension Scores. Note: The figure demonstrates the scores of the sample in the dimensions of the Burnout model.*

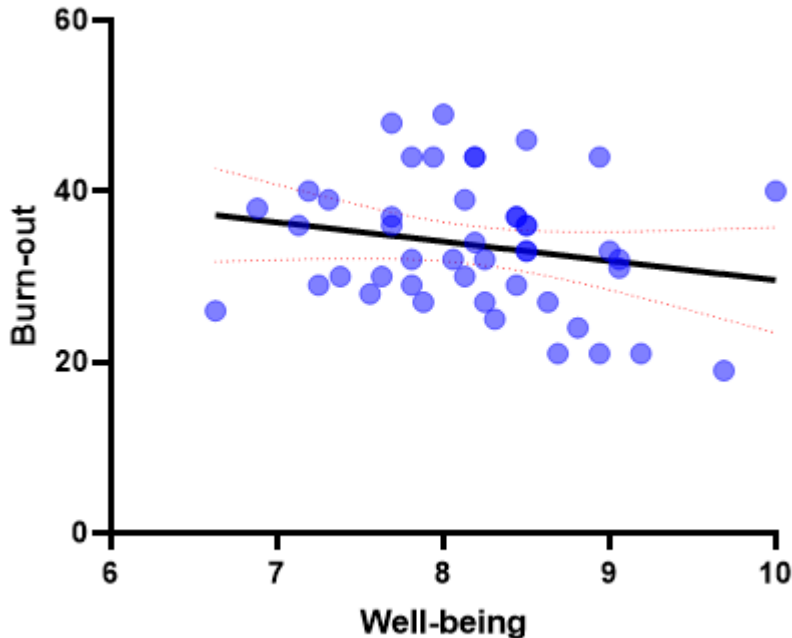


When possible, differences regarding well-being and burnout based on sex were evaluated, the data indicated that these psychological features were similar between men and women, and only Relationships dimension of well-being was significantly higher in women ( $p = .007$ ,  $d = -0.84$ ). To evaluate the relationship between age and burnout and well-being dimensions, a Spearman correlation analysis was performed. In this sense, we observed a significant and opposite relationship between meaning dimension and age ( $r = -0.38$ ,  $p = .009$ ).

One of the main objectives of this study was to evaluate the possible relationship between perceived burnout and well-being in athletes. Again, after performing a Spearman correlation analysis, our data revealed an inverse correlation between these dimensions ( $r = -0.21$ ,  $p = .156$ ), although in this case, the association did not reach the statistical significance level (Figure 3). However, perceived *burnout* was statistically and positively correlated with negative emotions  $r = 0.29$ ,  $p = .024$ ).

**Figure 3**

*Relationship between Well-being and Burnout.*



Note: The figure demonstrates the correlations between Well-being and Burnout of the sample. Interpolated regression line (black line) and 95% confidence interval (red dashed lines).

With the aim of identifying those variables that may explain the perceived burnout, a linear regression analysis was conducted. The total score of the ABQ test was configured as the dependent variable as a measurement of perceived burnout. On the other hand, perceived well-being and its dimensions were selected as explainable features. Our analysis revealed that the most relevant predictor variable was again negative emotions (coefficient =  $0.36 \pm 0.18$ ,  $p = 0.048$ ), with a total amount of explained variance of 6.4% ( $R^2_{adj} = 0.064$ , ). Focusing on the burnout dimensions, the health well-being dimension was able to explain 25% of physical and emotional exhaustion ( $R^2_{adj} = 0.250$ ,  $F = 4.101$ ,  $p = 0.049$ ). Achievement well-being dimension (coefficient =  $-0.57 \pm 0.15$ ,  $p < 0.001$ ) also explained 22.6% of the reduced sense of achievement burnout dimensions ( $R^2_{adj} = 0.226$ ,  $F = 14.167$ ,  $p < 0.001$ ). In contrast, no well-being dimension was associated with sports devaluation.

## DISCUSSION

The aim of this work was to understand the perceived psychological well-being and burnout symptomatology of elite athletes, analysing the relationship between constructs and evaluating which dimensions of the well-being according to the PERMA model could protect from burnout syndrome. Overall, we can confirm that the self-reported perceived well-being of the athletes was high, an issue explained by activities with purpose or meaning, commitment, satisfactory interpersonal relationships, positive emotions and feelings of achievement, in this order. These results were significantly higher than in Spanish non-elite team athletes, in which the most prominent dimensions were personal relationships and meaning, and the least marked were Feelings of Achievement (Díaz-Ceballos et al., 2024). Such differences could be a consequence of the sports modality of the different study participants, the category, or the context. It makes sense that, in team sports, relationships are a priority, since



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collaboration and mutual support can have a positive effect on the individual's performance and feelings (Uusiautti et al., 2017).

Feelings of achievement was the least rated dimension and refers to achieving personal goals and objectives that have significant intrinsic value. Feelings of achievement involve developing individual potential by striving for meaningful results in different areas of life and persevering despite challenges (Seligman, 2012). This information makes us aware of the importance of continuing to work on the intrinsic motivation of our athletes.

When differences on well-being were analysed based on sex, the statistical analyses revealed no significant differences in the total well-being scores, as a previous study pointed out (Díaz-Ceballos et al., 2024), but there were in the dimension Satisfactory interpersonal relationships, where women score higher.

Concerning burnout symptomatology, physical and emotional exhaustion, reduced feelings of achievement and devaluations of sports practice stand out, in this order. These results are in convergence with other studies that confirm fatigue and physical exhaustion as the most prevalent symptomatology of the syndrome, followed by lack of motivation and devaluation of sports practice (García-Jarillo et al., 2020).

Sex does not seem to be a significant feature in relation to the burnout symptoms observed. Contrary to what was found in previous studies, where women were characterized by a higher exhaustion dimension and men by higher depersonalization dimension (de Francisco et al., 2014). The lack of differences observed in the present work could be due to fewer differences based on sex in elite sports compared to other types of non-professional or recreational sports.

Following the observations, the athletes that participated in the present study reduced their well-being when feelings of achievement were reduced, and their burnout symptoms increase as negative emotions increase. Similarly, other studies point to the difficulty in experiencing positive emotions as the cognitive symptomatology of burnout (García-Jarillo et al., 2020). Furthermore, we found that the greater burnout symptoms were associated with lower perceived psychological well-being, in the same line as depicted in various previous studies (Madigan et al., 2019; Bazargan-Hejazi et al., 2021; Nicholls et al., 2022). It seems that, for an elite athlete, the variable that makes most vulnerable to burnout is the emotional management of their negative emotions, tendencies to feel sad, anxious and angry. In fact, scientific literature informs us of greater burnout associated with people who tend to hide negative emotions (Lachowska & Minda, 2020).

Positive emotions are pillars of mental health and participate in the context of sport as a fundamental element for the search for excellence, recognizing achievements and goals. Thus, these emotions form the cornerstone of their well-being (Uusiautti et al., 2017). Furthermore, positive emotions are often associated with the ability to solve problems more efficiently, undo persistent negative emotions, and build resilience (Fredrickson, 2001).

It is possible to find support in other relevant research on sport and well-being that highlights an important relationship between the variables of positive emotions and well-being in the sports context, in a similar way to the results presented in this study. Puri & Sood (2018) consider positive emotions as the main factor responsible for facilitating cognition and management of the multiple demands experienced by athletes. Lane et al. (2010) demonstrated a consistent relationship between positive emotions and optimal sport performance, as well as the opposite, that is, negative emotions associated with dysfunctional sport performance. Furthermore, these authors refer that positive emotions are correlated with emotional intelligence and athletes with low levels of emotional intelligence appear to experience high levels of negative emotions. Moreover, studies on mental health indicate that interventions based on the constructs of positive psychology, especially resilience, well-being and social support, can promote benefits in reducing stress and assist in recovery from serious illnesses with physical symptoms (Presciutti et al., 2023).

The limitations of this study are associated with its cross-sectional nature, which limits our observations towards the generation of new hypotheses. Furthermore, there is a certain heterogeneity in the sports disciplines considered that may introduce variability in the results. The sample size is relatively small for making robust statistical inferences, but the elite status of the participants should be considered. In addition, questionnaires were applied online, which has advantages and disadvantages. Although it allows for more widespread application, completion does not allow the supervision of a sports psychologist who could address any possible doubts in the implementation that may arise. Finally, it is interesting to add that Cronbach's Alpha in the PERMA profiler with our athletes does not reach the expected 0.70. So, this indicates the need to adapt the instrument to the population of elite athletes.

## **CONCLUSION**

According to the results of this study, it can be drawn that the perceived psychological well-being of the athletes was high and without differences by sex, an issue that might be explained mainly by activities with purpose and engagement that generate well-being. The least rated area of the PERMA model corresponded to feelings of ability to achieve goals. The area of satisfactory interpersonal relationships was rated higher by women. In the case of the burnout-related symptoms, physical exhaustion stands out, followed by symptoms related to a reduced sense of achievement and devaluation of sports practice. No differences were found in these symptoms between men and women, or by age. The greater the burnout symptoms, the lower the perceived psychological well-being was reported. Elite athletes reduce their well-being when feelings of achievement are reduced, and their burnout symptoms increase as negative emotions increase. The variable that can make an athlete more vulnerable to suffering from burnout symptoms is their negative emotions, that is, tendencies to feel sad, anxious, and angry. Athletes who experience higher levels of well-being, especially positive emotions, are more capable of protecting themselves from burnout, which is why it is suggested to put into practice positive and third-generation psychology interventions to enhance the perception of perceived well-being, encouraging feelings of achievement either through attention to emotional intelligence, intervention in their dispositional optimism, and improvement of their intrinsic motivation and task-focused strategies.

## **PRACTICAL APPLICATIONS**

Regarding practical application, this study shows the importance of encouraging feelings of achievement. Thus, it is recommended to pay attention to emotional intelligence, a feature that regulates the psychological well-being of athletes (Núñez et al., 2011). Furthermore, it is suggested to intervene in dispositional optimism since, as it has been commented, increasing the optimism is a strategy to also increase the achievements dimension of the PERMA model (Fernández-Abascal, & Díaz, 2022). Likewise, it is recommended to intervene to improve intrinsic motivation, and strategies focused on the task and the sports experience, which appear in previous studies as predictors of sports psychological well-being (Cantón-Chirivella et al., 2015). Other practical application is the need to raise awareness of burnout symptoms (without differences based on sex) among coaches. It is already known that prevalence estimates can vary by sport and context, but what is certain is that this psychological condition is likely underrecognized, underreported, and underdiagnosed. In addition, it would be interesting to carry out psychoeducational programs so that athletes can become aware of it.

At last, it is becoming quite evident that positive mental health of elite athletes is important. Therefore, we leave as proposals for future research, the need to operationalize these theories and well-being models in the daily life of athletes, such as, for example, with the implementation of third generation intervention programs to evaluate the impacts on negative emotions in a sample with high burnout scores.

## **ACKNOWLEDGMENTS**

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