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Psychological well-being and healthy personality in sports practice
Bienestar psicológico y personalidad saludable en la práctica deportiva

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Abstract. This study investigates the relationship between sports practice, psychological well-being, and personality traits. It involved 761 participants from Spain (80.6%) and Argentina (19.4%), comprising 37.1% men and 62.9% women, with a mean age of 20.4 years (SD: 7.5). Among them, 70.8% engaged in regular sports activities, contrasting with 29.2% who did not. The Scales of Psychological Well-being and the NEO-FFI were the assessment instruments chosen in order to measure psychological well-being and personality traits. Data analysis consisted of Student's t-tests and multiple linear regression models. The results reveal higher scores in five of six psychological well-being dimensions and healthier personality traits among subjects that engage in sports practice. Noteworthy enhancements were found in Self-acceptance, Autonomy, Environmental Mastery, Personal Growth, and Life Purpose for sports participants. Personality traits significantly mediate between sports practice and psychological well-being dimensions. Extraversion, Openness, and Conscientiousness correlate positively with well-being dimensions, while Neuroticism negatively impacts several aspects.
Keywords: Sports practice, psychological well-being, athlete well-being, sport psychology, exercise psychology, personality traits, Big Five Model.

Resumen. Este estudio investiga la relación entre la práctica deportiva, el bienestar psicológico y los rasgos de personalidad. Participaron 761 personas de España (80,6%) y Argentina (19,4%), de las cuales el 37,1% eran hombres y el 62,9% mujeres, con una edad media de 20,4 años (DT: 7,5). Entre ellos, el 70,8% realizaba actividades deportivas con regularidad, en contraste con el 29,2% que no lo hacía. Las Escalas de Bienestar Psicológico y el Cuestionario de Personalidad NEO-FFI fueron los instrumentos de evaluación elegidos para medir el bienestar psicológico y los rasgos de personalidad. El análisis de los datos consistió en pruebas t de Student y modelos de regresión lineal múltiple. Los resultados revelan puntuaciones más altas en cinco de las seis dimensiones del bienestar psicológico y rasgos de personalidad más saludables entre los sujetos que practican deporte. Se encontraron mejoras notables en Autoaceptación, Autonomía, Dominio del entorno, Crecimiento personal y Propósito de vida para los participantes en deportes, mientras que no se hallaron diferencias significativas en Relaciones positivas. Los rasgos de personalidad median significativamente entre la práctica deportiva y las dimensiones de bienestar psicológico. La Extraversión, la Apertura y la Conciencia correlacionan positivamente con las dimensiones de bienestar, mientras que el Neuroticismo incide negativamente en varios aspectos. Esta correlación corrobora estudios previos que destacan el papel de la personalidad en el deporte y el bienestar general.
Palabras clave: Práctica deportiva, bienestar psicológico, bienestar del deportista, psicología del deporte, psicología del ejercicio, rasgos de personalidad, Modelo de los Cinco Grandes.

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Introduction

Well-being has been studied from two perspectives: subjective and psychological. Subjective well-being, according to Diener (2013) and Diener et al. (2018), is based on those experiences that make life pleasant or unpleasant, bearing in mind the beliefs and attitudes about one's own life (cognitive component) and the positive and negative affect (affective-emotional component) experienced by people, considering short and medium-term changes. Other authors, such as Deci & Ryan (2008), identify it as a hedonistic tradition, which focuses on happiness, defined as the presence of positive affect and the absence of negative affect. On the other hand, we have psychological well-being, identified by Deci & Ryan (2008) as the eudaimonic tradition, which focuses on living life in a full and deeply satisfying way. It is a concept used in psychology, which includes social, subjective, and psychological dimensions, as well as health-related behaviors in general, that lead people to function in a positive way. "Psychological well-being expresses the positive feeling and constructive thinking of human beings about themselves, which is defined by its subjective experiential nature and is closely related to particular aspects of physical, psychological and social functioning" (Victoria García-Viniegras, y González Benítez, 2000, p. 588).

Psychological well-being is linked to self-acceptance, referring to a positive attitude towards oneself and towards distinct aspects of reality and the past (García Bermúdez, 2017). As opposed to the concept of subjective well-being, the so-called psychological well-being emphasizes the characteristics related to the subject's development, optimal and positive long-term functioning, being a reliable indicator of healthy life (Steptoe et al., 2015).

Personality, on the other hand, according to McCrae & Costa (1990), is conceived as a set of relatively enduring styles of thinking, feeling, and acting that characterize an individual. Personality traits are general tendencies that are reflected in many aspects of a person's life. It is conceptualized as the set of psychological characteristics associated with behaviors, emotions, and thoughts, which involves a pattern of attitudes, emotions, thoughts, behaviors, or habits that remains relatively stable throughout the life cycle, despite the different circumstances that may arise and that distinguishes one person from another. In recent decades, the Big Five model (Goldberg, 1990, 2013; McCrae & Costa, 1990, 2021; John, 2021, etc.) is more widely used as a referent of the structure of factors

that make up personality. It includes the following personality dimensions: Neuroticism, defined as the factor related to the general tendency to experience negative feelings such as fear, melancholy, shame, anger, guilt, and disgust. Extraversion is defined as the tendency to bond with people and show a preference for groups and social gatherings. Openness is understood as people who are open, interested in the outside world as well as the inner world, who consider having innovative ideas and unconventional values, and who tend to feel emotions in a deeper way. Kindness is typical of altruistic people who sympathize with others and are willing to help. Responsibility is a dimension based on impulse control that involves planning, organization, and accurate execution of tasks and decisive behavior.

More recently, a line of work developed by Van der Linden et al. (2017, 2023), Dunkel, et al. (2021, 2024), etc., shows within the Big Five model, the existence of certain response tendencies related to the presence of a more adaptive and healthy response. Thus, the so-called general personality factor (GPF or P) would show a general and stable tendency towards social effectiveness, sociality, and "emotionally intelligent behavior". This would be a tendency towards integral health (see Figure 1) that would imply the ideal personality profile of a subject that, in turn, would be identified with the so-called "good adult temperament" (Benito Moreno, 2017).

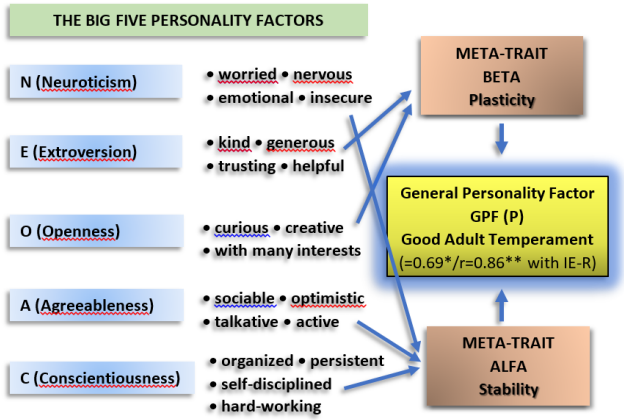

Figure 1. Relationship between the General Personality Factor (GPF) and Emotional Intelligence Trait with the Big Five Personality Factors. Adapted from Benito Moreno (2017).

Finally, we have that the practice of sports is, in general, considered a healthy activity for any population group. There are very numerous benefits in terms of physical health that have been described as derived from exercise in general and the practice of sports in particular (Barbosa y Urrea, 2018; Bonilla y Sáez, 2014). But equally, numerous authors point out that sport is also understood as a resource highly conducive to mental health (Barbosa y Urrea, 2018; Bover et al., 2020). In fact, since the first steps of medicine, sports practice and health have found a shared territory, favored by both perspectives. The classic Latin aphorism of "*mens sana in corpore sano*" is a good example of the interdependence that has always been seen between adequate physical health and its corresponding mental adjustment. Thus, the practice of sports can be understood as an activity that will favor the presence of both desirable psychological well-being and healthier personality traits among those who practice it (Hernández Pérez, 2021).

Therefore, the general objective of the study is to provide evidence of the relationship between the practice of sports, psychological well-being, and healthy personality traits. This general objective is articulated in a series of specific objectives that allow us to determine the values, relationships, and behavior of both variables, considering control variables to respond to the main objective. 1st.- To verify whether there is a significantly higher probability of finding a greater psychological well-being among those individuals who practice sports on a regular basis, compared to those who do not practice sports. 2nd.- To detect which components of psychological well-being have significant relationships with the practice of sport. 3rd.- To check if there is a significantly higher probability of finding a healthier personality, in terms of GPF or P, among those individuals who practice sport on a regular basis, compared to those who do not practice sport. 4th.- To detect which healthy personality factors present significant relationships with sports practice. 5th.- To analyze the characteristics of the relationship between psychological well-being and personality traits. And 6th.- To study the viability of a model that integrates personality traits and the components of psychological well-being with the practice of sports.

Methods

Participants

The study was carried out from a sample of 761 participants from Spain (80.6%) and Argentina (19.4%); 37.1% men and 62.9% women; mean age 20.4 years, SD: 7.5. A total of 70.8% habitually practiced sports, compared to 29.2% who did not. For this purpose, an incidental sampling of subjects was made, from a first random cluster sampling, carried out among sports clubs and university sports teams in the southeast region of Spain and the northwest region of Argentina. Participation was voluntary, consented, and anonymous, and the design of the study was supervised by the Research Ethics Committee of the University of Murcia. All participants were informed about the confidentiality of the data and the objectives of the research, following the ethical standards indicated by the Ethics Committee of Spanish University researchers (2022). The doubts that arose at the time of the application of tests were clarified by the study authors.

Instruments

In addition to the standardized tests listed below, a sociodemographic questionnaire was also administered to collect data on the age, sex and whether or not the participants practiced sport on a regular basis (at least once a week).

Psychological Well-Being Scale (PWBS)

Developed by psychologist Carol D. Ryff, the PWW

Scale measures six aspects of wellbeing and happiness: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. A new reduced version of 29 Likerts item of the of Psychological Well-being Scale (Ryff, 1989), version by Van Dierendonck (2004), Spanish adaptation by Díaz, et al. (2006), were applied. It consists of 29 Likert items answered on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). All the scales exhibited good internal reliabilities, with Cronbach alpha's ranging from 0,84 (Self-acceptance) to 0,70 (Personal growth).

Reduced NEO Five Factor Inventory (NEO-FFI)

The NEO-FFI is a short 60-item version of the NEO-PI-R (Costa and McCrae, 1992). It has a Likert-type response format with five options, from A (strongly disagree) to E (strongly agree), and was adapted to Spanish by Cordero et al. (2008). The NEO-FFI consists of five personality dimensions: Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A) and Responsibility (C). The internal consistency reliability (Cronbach's alpha) ranges from 0.85 (E) to 0.91 (C).

Procedure

The participants were administered the different tests in specific group evaluation sessions held in the facilities of their institutions of origin (universities or sports clubs). The first author of this article was always present at these sessions.

Statistical Analysis

To determine the possible relationship between sports practice, psychological well-being, and personality scale scores, several Student's t-tests were performed. In addition, to determine the possible effect, both differential and joint, of some sociodemographic variables (sex, age, and sports practice) and of the five personality dimensions on the different scales measuring psychological well-being, six multiple linear regression models were performed by backward stepwise regression. The results of both analyses are shown in the following section.

Hypothesis 1 considers that the affirmative sports practice variable will differentiate those subjects with a higher degree of psychological well-being and those with better scores on the personality scales that evaluate the more adaptive and healthy responses. Hypothesis 2 states that it will be possible to obtain a model that allows predicting psychological well-being from a combination of the healthiest dimensions of personality with the presence of the practice of sports.

Results

The results show significant differences ($p<.000$ and $p<.05$) between those who practice sports versus those who do not, showing a trend towards better scores in five of the six well-being dimensions studied, and a trend towards healthier and more central personality traits.

Specifically, they appear with higher scores in Self-acceptance, Autonomy, Environmental mastery, Personal growth and Life purpose. While they do not show significant differences in Positive Relationships (Table 1).

Table 1.
Descriptive and Comparative Analysis of Psychological Well-Being and Personality, according to Sports Practice

Psychological Well-Being	Sports Practice, mean (SD)		Difference	t-Student test		d
Personality	No	Yes	of means	t(d.f.)	p-value	
Self-acceptance	16,83 (4,19)	17,93 (4,08)	-1,10	t(552) = -2,92	0,004	-0,27
Positive relations	23,54 (7,12)	23,59 (5,30)	-0,05	t(549) = -0,09	0,932	-0,01
Autonomy	24,73 (5,73)	25,78 (5,60)	-1,05	t(549) = -2,04	0,042	-0,19
Environmental mastery	20,49 (4,48)	21,46 (4,20)	-0,97	t(550) = -2,47	0,014	-0,23
Personal growth	19,85 (2,97)	20,22 (3,17)	-0,37	t(550) = -1,31	0,19	-0,12
Purpose in life	20,92 (4,85)	22,20 (5,05)	-1,28	t(544) = -2,79	0,005	-0,26
Neuroticism	25,40 (8,87)	22,85 (9,23)	2,55	t(529) = 2,99	0,003	0,28
Extraversion	29,27 (8,09)	31,56 (7,44)	-2,29	t(522) = -3,17	0,002	-0,30
Openness	29,95 (7,02)	31,27 (7,11)	-1,32	t(530) = -1,99	0,047	-0,19
Agreeableness	29,91 (5,54)	29,67 (6,09)	0,24	t(539) = 0,43	0,671	0,04
Conscientiousness	29,98 (7,27)	30,06 (7,71)	-0,08	t(537) = -0,12	0,908	-0,01

SD: standard deviation. d.f.: degrees of freedom. d: Cohen's d (effect size).

The effect size in these relationships is between medium and small, in three of those in which there are significant differences. In addition, the greatest effect of practicing sports is found in Life Purpose, which is medium, followed by Environmental Mastery, dimensions in which the resulting well-being is lumped together (see Table 1). On the other hand, the differences in psychological well-being between those who practice individual sports (tennis, athletics, etc.) versus collective sports (soccer, basketball, etc.) were not significant for any of its dimensions (see Table 2).

Table 2.
Descriptive and Comparative Analysis of Psychological Well-Being and Personality, according to Type of Sport

Psychological Well-Being	Type of Sport, mean (SD)		Difference of means	t-Student test		d
Personality	Individual	Collective		t(d.f.)	p-value	
Self-acceptance	17,80 (4,16)	18,29 (3,84)	-0,49	t(378) = -1,04	0,300	-0,12
Positive relations	23,44 (5,44)	23,99 (4,89)	-0,55	t(379) = -0,89	0,374	-0,10
Autonomy	25,78 (5,77)	25,79 (5,10)	-0,01	t(377) = -0,02	0,986	0,00
Environmental mastery	21,47 (4,28)	21,45 (4,00)	0,02	t(378) = 0,05	0,961	0,01

Personal growth	20,25 (3,14)	20,17 (3,26)	0,08	t(376) = 0,21	0,835	0,02
Purpose in life	22,25 (5,18)	22,09 (4,67)	0,16	t(375) = 0,27	0,789	0,03
Neuroticism	23,19 (9,69)	21,90 (7,81)	1,29	t(363) = 1,18	0,238	0,14
Extraversion	31,26 (7,40)	32,41 (7,51)	-1,15	t(361) = -1,30	0,195	-0,15
Openness	31,64 (7,32)	30,23 (6,40)	1,41	t(362) = 1,69	0,093	0,20
Agreeableness	29,71 (6,34)	29,58 (5,36)	0,13	t(370) = 0,18	0,859	0,02
Conscientiousness	30,41 (7,66)	29,11 (7,81)	1,30	t(365) = 1,44	0,150	0,17

SD: standard deviation. d.f.: degrees of freedom. d: Cohen's d (effect size).

Specifically, the dimensions that showed a statistically significant difference were Extraversion and Openness. In both, the score of those who practice sports was significantly higher. However, in the Neuroticism dimension, the score was significantly higher in those who do not practice sport (see Table 1). Again, also for this other variable, the differences in personality between those who practice individual sports (tennis, athletics, etc.) versus collective sports (soccer, basketball, etc.) were not significant for any of its dimensions (see Table 2).

The effect size in these relationships is moderate in the three cases in which there are significant differences. Thus, the greatest effect due to the practice of sport occurs in Extraversion, followed by Neuroticism (of an inverse nature), and finally by Openness, which shows a small result (see Table 1).

In order to explore the way in which the different variables considered in the study are related and be able to elaborate a model of their interaction, their correlation matrix was previously considered (see Table 3), and the correlations were mostly moderate.

Table 3.
Means (standard deviations), reliability index and correlations between scales

	Mean (SD)	Cronbach's alpha	1	2	3	4	5	6	7	8	9	10
1. Neuroticism	23,65 (9,19)	0,904	1									
2. Extraversion	30,86 (7,71)	0,847	-0,34*	1								
3. Openness	30,85 (7,10)	0,826	0,09	0,34*	1							
4. Agreeableness	29,74 (5,92)	0,839	-0,31*	0,26*	0,36*	1						
5. Conscientiousness	30,03 (7,57)	0,886	-0,33*	0,39*	-0,03	0,31*	1					
6. Self-acceptance	17,58 (4,14)	0,834	-0,61*	0,52*	0,09	0,33*	0,31*	1				
7. Positive relations	23,57 (5,91)	0,812	-0,29*	0,36*	0,05	0,39*	0,14*	0,42*	1			
8. Autonomy	25,45 (5,65)	0,738	-0,46*	0,26*	0,01	-0,01	0,42*	0,54*	0,27*	1		
9. Environ. mastery	21,16 (4,31)	0,719	-0,58*	0,42*	0,03	0,41*	0,46*	0,67*	0,37*	0,41*	1	
10. Personal growth	20,11 (3,11)	0,686	-0,25*	0,34*	0,27*	0,35*	0,31*	0,55*	0,38*	0,26*	0,49*	1
11. Purpose in life	21,81 (5,02)	0,832	-0,44*	0,43*	0,12	0,45*	0,56*	0,73*	0,37*	0,36*	0,72*	0,54*

* $p < 0,05$

Bearing in mind our hypothesis 2, to determine the possible effect of demographic variables (sex, age and sports practice) and personality dimensions on psychological well-being, multivariate linear regression models were performed, which results are shown below.

Table 4 shows the results of the dimensions self-acceptance, positive relationships and autonomy. In self-acceptance, neuroticism has a significant indirect effect (the higher the score the lower the self-acceptance score), while extraversion, openness and awareness had a direct effect (the higher the score the higher the self-acceptance score). In positive relationships, neuroticism has a significant indirect effect (the higher the score the lower the score in positive relationships), whereas extraversion and agreeableness had a direct effect (the higher the score the higher the score in positive relationships). In autonomy, neuroticism has a significant indirect effect (the higher the score the lower the autonomy score), whereas extraversion and agreeableness had a direct effect (the higher the score the higher the autonomy score).

Table 4.
Effect of demographic and personality variables on the self-acceptance, positive relationships, and autonomy dimensions of psychological well-being.

	Self-acceptance			Positive relations			Autonomy		
	B (SE)	t	p-value	B (SE)	t	p-value	B (SE)	t	p-value
Sex (Male vs. Female)	0,63 (0,35)	1,79	0,074	-0,35 (0,66)	-0,52	0,604	0,43 (0,58)	0,74	0,460
Age	0,01 (0,02)	0,51	0,609	0,01 (0,04)	0,29	0,773	0,05 (0,04)	1,39	0,166
Sports practice (Y/N)	-0,06 (0,33)	-0,17	0,862	-0,94 (0,63)	-1,49	0,137	0,18 (0,55)	0,33	0,742
Neuroticism	-0,21 (0,02)	-10,18	< 0,001	-0,12 (0,04)	-3,09	0,002	-0,26 (0,03)	-7,53	< 0,001
Extraversion	0,19 (0,02)	8,96	< 0,001	0,22 (0,04)	5,49	< 0,001	0,11 (0,04)	3,16	0,002
Openness	0,06 (0,02)	2,59	0,010	0,01 (0,04)	0,32	0,747	0,04 (0,04)	1,14	0,254
Agreeableness	0,00 (0,03)	0,14	0,889	0,16 (0,05)	3,09	0,002	-0,16 (0,05)	-3,46	0,001
Conscientiousness	0,05 (0,02)	2,33	0,020	-0,01 (0,04)	-0,13	0,896	0,06 (0,04)	1,65	0,099
R^2 (%)	50,3			17,6			26		
Model	F(8;395) = 472,87; p < 0,001			F(8;394) = 380,84; p < 0,001			F(8;393) = 454,95; p < 0,001		

B: unstandardized coefficients. SE: standard error. Beta: standardized coefficients. R^2: coefficient of determination.

Table 5 shows the results of the environmental mastery, personal growth and life purpose dimensions. In environmental mastery, age showed a significant and direct effect (the higher the age, the higher the score in environmental mastery). The practice of sports also showed a significant effect (people who practice sports have higher scores than those who do not practice sports). As for the personality dimensions, neuroticism had a significant indirect effect (the higher the score, the lower the environmental mastery), while extraversion, openness and conscientiousness had a direct effect (the higher the score, the higher the environmental mastery). In personal growth, neuroticism has a significant indirect effect (the higher the score the lower the personal growth), while extraversion, openness and awareness had a direct effect (the higher the score the higher the personal growth). In life purpose, sports practice has a significant effect (people who practice sports have a higher score than those who do not practice sports). Neuroticism has a significant indirect effect (the higher the score the lower the personal growth), while extraversion, openness and awareness had a direct effect (the higher the score the higher the personal growth).

Table 5.
Effect of demographic and personality variables on the environmental mastery, personal growth, and life purpose dimensions of psychological well-being.

	Environmental mastery			Personal growth			Purpose in life		
	B (SE)	t	p-value	B (SE)	t	p-value	B (SE)	t	p-value
Sex (Male vs. Female)	-0,31 (0,37)	-0,85	0,397	0,37 (0,32)	1,16	0,247	-0,10 (0,43)	-0,24	0,811
Age	0,06 (0,02)	2,60	0,010	0,02 (0,02)	0,75	0,454	0,05 (0,03)	1,70	0,091
Sports practice (Y/N)	0,69 (0,35)	2,01	0,045	0,12 (0,30)	0,41	0,683	0,82 (0,40)	2,04	0,042
Neuroticism	-0,20 (0,02)	-9,15	< 0,001	-0,04 (0,02)	-2,01	0,045	-0,12 (0,03)	-4,71	< 0,001
Extraversion	0,11 (0,02)	5,13	< 0,001	0,08 (0,02)	4,15	< 0,001	0,16 (0,03)	6,27	< 0,001
Openness	0,02 (0,02)	0,82	0,411	0,10 (0,02)	5,13	< 0,001	0,06 (0,03)	2,25	0,025
Agreeability	0,01 (0,03)	0,49	0,627	0,04 (0,03)	1,37	0,173	0,02 (0,03)	0,72	0,474
Conscientiousness	0,13 (0,02)	5,99	< 0,001	0,09 (0,02)	4,43	< 0,001	0,29 (0,03)	10,65	< 0,001
R^2 (%)	46,4			21,5			46,7		
Model	F(8;394) = 434,61; p < 0,001			F(8;393) = 111,47; p < 0,001			F(8;392) = 597,33; p < 0,001		

B: unstandardized coefficients. SE: standard error. Beta: standardized coefficients. R^2: coefficient of determination.

Discussion

The present study sought to explore the relationship between sports practice, psychological well-being, and personality traits. The results revealed significant differences between individuals engaged in sports practice and those who were not, indicating better scores in five out of six dimensions of psychological well-being, as well as healthier and more central personality traits. Specifically, participants involved in sports demonstrated higher scores in Self-acceptance, Autonomy, Environmental Mastery, Personal Growth, and Life Purpose, while no significant differences were observed in Positive Relationships.

These findings are in line with previous research (Laborde et al. 2016; Malinauskas, & Malinauskiene, 2018), that has highlighted the positive impact of sports participation on psychological well-being and personality development, also for persons with disabilities (Trujillo Santana, 2022). Engaging in regular physical activity through sports has been linked to increased feelings of self-acceptance and personal growth. It provides individuals with a sense of mastery over their environment and fosters autonomy and life purpose. Sports involvement often creates a structured and goal-oriented lifestyle, encouraging individuals to set and achieve personal objectives, building a greater sense of life purpose. Particularly, the effect size of sports practice on psychological well-being was found to be between moderate and small in three of the significant dimensions. Among these, the most substantial effect was observed in the dimension of Life Purpose, followed by Environmental Mastery (Steca et al., 2018). This suggests that participating in sports might have a stronger impact on an individual's sense of direction and purpose in life, as well as their ability to effectively manage their environment and be able to adapt to challenges.

The study also explored the differences between those engaged in individual sports and collective sports on both psychological well-being and personality traits. Surprisingly, the results indicated no significant differences between the two groups, suggesting that the benefits of sports practice on psychological well-being and personality traits are not limited to a specific type of sport. Thus, individuals may experience similar positive effects regardless of whether they participate in individual or collective sports. Extending the scope of this research, another study (Eather et al., 2023) focused on the impact of sports participation on mental health and social outcomes in adults. The systematic review revealed that participation in sports, both at community and elite levels, is related to better mental health, including improved psychological well-being and reduced levels of depression, anxiety, and stress. Furthermore, sports participation was associated with improved social outcomes, such as enhanced self-control, pro-social behavior, interpersonal communication (see also Wylleman, 2000), and a stronger sense of belonging. Moreover, other research (Granero-Jiménez et al., 2022; Ault, Blanton, & Pierce 2024), emphasized the clear influence of physical activity on the psychological well-being of young adults, with higher levels of physical activity being associated with greater psychological well-being. Intrinsic motivation was identified as a critical determinant of psychological well-being, particularly among male participants with higher physical activity.

On a related note, a study compared team sport athletes

to individual sport athletes regarding mental health diagnoses and athlete motivations for playing (Pluhar et al., 2019). Remarkably, individual sports athletes were more likely to report anxiety and depression than team sport athletes. The mental health benefits of participation in organized sports appeared to vary between individual sport athletes and those playing team sports. Finally, a study exploring psychological variables and sports performance in young athletes emphasized the importance of psychological well-being and mental health in contributing to successful sports performance (Gyomber et al., 2016). The study found differences in psychological variables based on age and gender, with certain factors showing greater relevance during sports counseling.

On the other hand, the present study investigated the relationship between sports practice, personality traits, and psychological well-being dimensions. The findings from the regression analysis indicated that certain personality traits played a significant role in mediating the relationship between sports practice and various dimensions of psychological well-being. Specifically, Neuroticism was found to negatively impact self-acceptance, positive relationships, and environmental mastery, while Extraversion, Openness, and Conscientiousness were positively associated with several aspects of psychological well-being, including self-acceptance, positive relationships, autonomy, environmental mastery, personal growth, and life purpose.

This aligns with previous research that highlighted the importance of mental health (Walton, et al., 2024) and personality in high-level sports athletes. Spielmann et al. (2023) found that personality traits and executive functions were influential parameters in understanding expertise in high-level soccer athletes. However, the relationship between personality traits and executive functions was found to be inconsistent, calling for further replication studies in high-level team sport athletes. Additionally, Librán (2006) found that personality dimensions, particularly Neuroticism, played a crucial role in subjective well-being. Neuroticism accounted for a considerable proportion of the variance in subjective well-being, highlighting its importance in overall well-being.

A precipitous rise in mental health issues can be seen in the college population, in which athletes represent a unique subset. In addition to the stress of their athletic commitments, they are still students and carry all the school responsibilities of their peers (Wood, 2024). Personality traits have also been studied in relation to exercise frequency across academic semesters in college students. Kroencke et al. (2019) found that higher initial levels of exercise frequency were related to higher levels of extraversion, conscientiousness, and lower levels of neuroticism. Moreover, increased exercise frequency was associated with higher levels of happiness and lower levels of anxiety. Furthermore, personality traits were examined in relation to self-control in boxers. Chen et al. (2018) found that self-efficacy mediated the relationship between the Big Five personality traits and self-control, suggesting that training self-efficacy could enhance self-control abilities and overall athletic performance. The influence of personality traits on well-being was studied in adults (Delhom, Satorres, y Meléndez, 2019), finding a negative association between psychological well-being and neuroticism, and positive relationships with all other Big Five traits. It was also studied in young people engaging in leisure activities. Asquith et al. (2022) found that personality traits were significant predictors of life satisfaction and negative affect, while leisure activities, along with personality traits, predicted positive affect, mental health, and flourishing. Moreover, a systematic review by Eather et al. (2023) explored the impact of sports participation on mental health and social outcomes in adults. The review confirmed that participating in any form of sport was beneficial for improving mental health and social outcomes. Team sports particularly seemed to provide additional benefits for mental and social well-being in adults. Similarly, a recent meta-analysis conducted by Amú-Ruiz, et al. (2024), highlighted the significant benefits of physical activity on depressive, anxiety, and/or stress symptoms in university students.

The relationship between athletic involvement, gender, and mental well-being was investigated by Miller and Hoffman (2009). They found that both team sport participation and athlete identity were associated with lower depression scores, while jock identity was associated with elevated odds of a suicide attempt. Furthermore, Iwon et al. (2021) explored the impact of physical exercise on subjective well-being. They found a strong relationship between subjective well-being and physical activity, with regular physical activity leading to higher levels of well-being. Recently, a specific scale has even been created to assess psychological well-being in physical activity and sports: the PWBPA scale (Piñeiro-Cossio, et al., 2023), which will be of great interest in clarifying relevant aspects of this interaction.

The physiological and psychosocial health benefits of sports were summarized by Malm et al. (2019), indicating that physical activity through sports participation contributed to better mental health and improved psychosocial development. Alfermann, & Stoll (2000) investigated the effects of exercise on self-concept and well-being, finding that exercise is a major, but not the only, strategy for improving mental health. Lastly, Tahira (2022) conducted a literature review and found a positive association between sports participation and mental health across the lifespan. Sports participation was linked to higher self-esteem, lower risk of anxiety and depression, and better overall psychological well-being in children, adolescents, and adults. Thus, there is a broad consensus about the benefits that sport generates in physical health and well-being (Bover et al., 2020). This association is observed in the present study, between a wide number of dimensions of psychological well-being and sports practice. Therefore, beyond the usual stereotypical recommendations, it can be concluded that sports practice has a significant effect on psychological well-being, even in confinement situations (Romero Ramos, 2023). Likewise, it is widely accepted that personality is a global expression of psychological functioning (Larsen & Buss, 2008). For all

these reasons, the fact that sports practice is associated with traits that are closer to a good mental adjustment is indicative of sport being related to a general and stable trend towards social effectiveness, sociality, and the "emotionally intelligent behavior" (Colom, 2018).

Therefore, it is possible to understand that the practice of sports is linked to a tendency towards comprehensive health, expressed in terms of the general personality factor (GPF or P) (Van der Linden et al., 2017). Said GPF factor (see Figure 1) would suppose the ideal personality profile of a subject who, in turn, would identify with the so-called "good adult temperament" (Benito Moreno, 2017). Hence, among other considerations, the practice of sports could even be recommended in a therapeutic intervention, to favor certain improvements in psychological functioning; both in some dimensions of their personality and in the general psychological well-being of people seeking psychotherapeutic support.

Conclusions

In conclusion, our study sheds light on the positive relationship between sports practice, psychological well-being, and healthy personality traits. Regular engagement in sports has consistently been linked to enhanced psychological well-being, fostering self-acceptance, personal growth, and a stronger sense of life purpose. Notably, these benefits extend across several types of sports, highlighting the impact of sports participation on individuals' mental and emotional well-being. Intrinsic motivation emerges as a crucial factor in promoting psychological well-being, particularly among young adults who actively participate in physical activities.

However, it is important to recognize that the impact of sports on mental health might vary between individual and team sport athletes, underscoring the significance of tailored support and guidance during sport psychological counseling. Furthermore, the interplay between nature and psychological well-being, as well as the intricate influence of psychological factors on sports performance, warrant further investigation, which aims to gain a deeper understanding of these complex connections.

Overall, our research contributes to the growing amount of evidence supporting the positive effects of sports on mental health and well-being, emphasizing the importance of promoting physical activity across diverse populations. Nevertheless, we acknowledge the need for more comprehensive studies to unravel the underlying mechanisms that drive these positive outcomes and to develop targeted interventions that can optimize mental health through sports participation.

Considering our findings, it is clear that personality traits play a pivotal role in mediating the relationship between sports practice and various dimensions of psychological well-being. Recognizing this association is crucial in promoting positive life outcomes and enhancing overall well-being in individuals who engage in sports activities. Regarding the limitations of the study, it is necessary to clarify its exploratory nature, having allowed new research proposals to be obtained. Thus, a pretest-posttest design with two treatment groups is proposed as a possible line to be developed, where the incorporation of sports practice in a psychological intervention protocol for the improvement of well-being among users can be assessed. In addition, the limitations inherent to having followed a cross-sectional design, which calls for more longitudinal research to establish causal relationships and to uncover the long-term effects of sports participation on well-being and personality development.

Future studies can build upon our findings to design and implement targeted interventions and training programs that consider personality traits and psychological well-being. By tailoring these interventions to individual needs, we can further enhance the benefits of sports engagement for individuals of all ages and backgrounds, fostering a healthier and more fulfilling life through sports. As we continue to explore the multifaceted relationship between sports, psychological well-being, and personality traits, we could enrich the lives of countless individuals and contribute to a more holistic understanding of human flourishing in the context of sports practice.

It is well known that the United Nations 2030 Agenda for Sustainable Development seeks to address environmental, economic, and social challenges in order to achieve a more equitable future for society as a whole. In the 2030 Agenda, the goal of "promoting well-being for all at all ages" is found under Sustainable Development Goal 3 (SDG3). The present research aims to directly contribute to achieving the main objective of SDG 3: "Good health and well-being", as it promotes both emotional well-being and mental health. Our physical and mental well-being is essential in order to be able to fully accomplish our activities, cope with the stresses of daily life, be productive at work and in our personal lives, and thus contribute positively to society. This paper provides evidence on how sports practice contributes to specific dimensions of psychological well-being.

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