



## DIFFERENCES BETWEEN U21 AND U23 SEMI-PROFESSIONAL SOCCER PLAYERS IN PERFECTIONISM AND PASSION

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### Abstract

**Study purpose.** The aim of this study is to analyse differences in perfectionism and passion and how these variables interact and might be expected to affect performance in U21 and U23 soccer players.

**Materials and methods.** A total of 60 healthy semi-professional soccer players (age: 21.57±1.95 years; height: 179.76±5.79 cm) participated in the study. The participants were divided into two equal groups, one with those players younger than 21 years old and the other including players aged 21–23. This study was descriptive with a cross-sectional design and used the Frost Multidimensional Perfectionism Scale (FMPS) and Passion Scale questionnaires.

**Results.** A paired-samples t-test was used for defining differences as a repeated measures analysis (U21 Group and U23 Group). Additionally, a t-test with data from the FMPS revealed significant differences in perfectionism global score, concern over mistakes, parental expectations, parental criticism, doubts about actions and organization.

The participants were shown to be a heterogeneous group in both perfectionism and passion, with moderate perfectionistic characteristics, except for the personal standards subscale, in which the opposite trend was found. According to the outcomes obtained, the U21 group shows significant values in terms of the level of perfectionism.

**Conclusions.** This research has highlighted the importance of addressing maladaptive perfectionism in interventions and support programs for athletes. Strategies such as promoting a growth mindset, encouraging self-compassion, and fostering a supportive and mastery-oriented environment have been suggested to help athletes manage perfectionistic tendencies and enhance their well-being and performance.

**Keywords:** adaptive perfectionism, maladaptive perfectionism, harmonious passion, soccer players, U23.

### Introduction

Semi-professional soccer teams must, at least, have a minimum of six players under-23 years-old (U23) of a total of 22 players. Joining these teams allows U23 players to train and play alongside professional players, improving their skills and increasing their visibility within the club. Therefore, Examining the psychological differences between U23 players (players under 23 years old) and older players can indeed provide valuable insights for guiding and developing strategies for players on their path to the elite level. The differences between younger and older soccer players have been studied in various fields, but mostly focusing on physical and physiological demands (Peña-González

et al., 2020), however, less attention has been placed on psychological variables (Huertas et al., 2019). Older players often have more life experience and may demonstrate greater emotional maturity and control compared to U23 players (Alesi et al., 2019; Champ et al., 2020). They may handle high-pressure situations better, maintain focus during matches, and cope with setbacks more effectively (Price et al., 2020). U23 players may benefit from guidance and support in developing emotional resilience and managing the pressures of elite soccer.

Perfectionism is indeed a personality trait characterized by striving for perfection and setting excessively high standards for oneself and others (Drigas et al., 2020). Individuals with perfectionistic tendencies often have an intense desire to avoid mistakes, seek flawless performance, and hold themselves to unattainable ideals (Fleming et al., 2022). According to Frost et al. (1990), perfectionism is considered a multidimensional construct, consisting of three

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dimensions: a) self-Oriented Perfectionism: this dimension reflects an individual's tendency to set high personal standards, have a strong internal drive for perfection, and exhibit self-critical tendencies. Those with high levels of self-oriented perfectionism may constantly strive to meet their own lofty expectations, leading to self-imposed pressure and a fear of failure, b) Other-Oriented Perfectionism: This dimension pertains to the expectations and demands individuals place on others to be perfect. People with high levels of other-oriented perfectionism tend to have strict standards for those around them and can be critical of others' performances. They may have difficulty delegating tasks or trusting others to meet their expectations and c) Socially Prescribed Perfectionism: This dimension reflects the perception that individuals hold excessively high expectations for oneself, based on the belief that others expect perfection. Those with high levels of socially prescribed perfectionism feel intense pressure to meet societal or social standards, fearing negative evaluations or judgments from others (Frost et al., 1993). Related to perfectionism are ambition and motivation, U23 players are often highly motivated and ambitious, seeking to establish themselves in the professional game. They may possess a strong drive to succeed and prove themselves (Lin & Muenks, 2022). Understanding and harnessing this motivation can help in setting appropriate goals and providing targeted support and guidance. It is important to note that Frost's model of perfectionism is widely recognized and has been influential in understanding the multidimensional nature of this construct. However, there have been subsequent developments and refinements to the understanding of perfectionism, including other models that propose additional dimensions or variations of the construct (Sederlund et al., 2020; Seong et al., 2021).

The work of (Flett & Hewitt, 2014) have indeed made significant contributions to the understanding of perfectionism in the context of sport and exercise. Their work has inspired numerous studies that have explored the correlates, causes, and effects of perfectionism in sport. Flett and Hewitt (2005), developed the Multidimensional Perfectionism Scale (MPS), that measures self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism, aligning with Frost's multidimensional model. They found that athletes with high levels of perfectionism, particularly self-oriented and socially prescribed perfectionism, are more prone to experience negative psychological outcomes such as anxiety, depression, burnout, and disordered eating (Freire et al., 2022; Olmedilla et al., 2022), while adaptive perfectionism can be associated with positive outcomes such as high achievement motivation and dedication (Flett & Hewitt, 2014).

Perfectionism, as a predisposition to set high standards for oneself, might subordinate to certain emotional or motivational variables, such as the experience of passion in sports. Passion, in the vast majority of cases, is defined as a strong, stable, long-lasting feeling that captures a person, possesses him and manifests itself in the orientation of all individual aspirations in one direction. It represents a deep enthusiasm, dedication, and enjoyment for the sport (Vallerand, 2016). In this regard, the Dualistic Model of Passion (DMP) (Vallerand, 2010, 2016) suggests that individuals engage in activities to fulfill psychological needs, such as competence, relatedness, and autonomy. The DMP

focuses specifically on the concept of passion and how it relates to the pursuit of activities.

According to the DMP (Vallerand, 2010), there are two types of passion: a) Harmonious Passion: refers to a strong internal desire and inclination to engage in an activity because it is personally valued and aligned with one's identity and b) Obsessive Passion: on the other hand, is characterized by an uncontrollable and compulsive urge to engage in an activity. The DMP suggests that the key difference between harmonious and obsessive passion lies in the internalization process. Harmonious passion is developed through autonomous internalization, where individuals freely choose to engage in the activity because they find it enjoyable and personally meaningful. In contrast, obsessive passion arises from controlled internalization, where individuals engage in the activity due to external pressures or contingencies, such as social expectations or rewards. In the sports context, obsessive passion can be associated with maladaptive outcomes such as stress and burnout, injury proneness, worry and anxiety and moral disengagement (Vallerand, 2015), while harmonious passion is linked to adaptive outcomes as enjoyment and flow, self-esteem, psychological well-being, persistence and longevity and autonomy (Clohessy et al., 2021; Konter et al., 2020; St-Cyr et al., 2023)

The interrelation between perfectionism and passion has received increasing attention in recent research across various fields, including sports psychology, education, and work settings. Understanding the interplay between these constructs can provide valuable insights into how they influence each other and their combined impact on outcomes (Jordana et al., 2022). Research suggests that perfectionism can influence the development and nature of passion (Smith et al., 2020). Specifically, self-oriented perfectionism may enhance the formation of harmonious passion when individuals perceive their achievements as personally fulfilling and congruent with their identity (Woods et al., 2022). However, socially prescribed perfectionism, with its focus on meeting others' expectations, may undermine the development of harmonious passion and lead to obsessive passion (St-Cyr et al., 2023). Passion can also influence perfectionism. Harmonious passion is associated with adaptive perfectionism, where individuals set high standards for themselves based on intrinsic motivation and personal values. In contrast, obsessive passion may be associated with maladaptive perfectionism, where individuals set unattainable standards and experience excessive self-criticism and fear of failure (Flett & Hewitt, 2014).

Chamorro et al. (2019) found that young talented Spanish football players who developed their sporting careers in a highly competitive environment and maintained commitment to other areas of life (e.g. academic or personal) were more adaptive in terms of autonomous motivation, harmonious passion and perceived satisfaction. The psychological characteristics indicate a basic psychological need compared to a player who is solely focused on becoming a professional player (Pedraza-Ramirez et al., 2020). Following De Oliveira et al. (2015), indicate that in professional soccer players who have professional contracts, adaptive perfectionism inclinations have a positive impact on intrinsic motivation and are considered a significant personality trait in the development of autonomous behavior. Conversely, in amateur athletes that lack professional

training, the propensity for perfectionism was found to be an intervening factor in the development of extrinsic motivation behaviors, this demonstrated that for athletes during their early career in sports, concerns regarding errors, doubts in action and parental criticism increase the athlete's-controlled behavior.

In general, although it has been found that perfectionism and passion are interrelated and they both can influence performance in a diversity of contexts, including sports, research on how these variables interact and might expect affect performance in team sports, such as soccer, is still scarce. Furthermore, it is relevant to analyze the levels of perfectionism and passion between U21 and U23 semi-professional soccer players.

## Materials and Methods

### Participants

A total of 60 healthy semi-professional soccer players ( $21.57 \pm 1.95$  years; height:  $179.76 \pm 5.79$  cm.) from the Andalusian region, which has a population ranging from 8,472,407 inhabitants according to the Spanish Government National Institute of Statistics (Instituto Nacional de Estadística, INE, 2023) <http://www.ine.es/>; accessed on March 21, 2023) participated in this study. This group was divided into two equal subgroups according to the age of the participants, one with players younger than 21 years ( $19.8 \pm 0.76$  years) and the other including players aged 23 years or younger ( $23.37 \pm 0.82$  years). The rationale for using 21 and 23-year-old as the division criterion was due the fact that semi-professional teams can have a maximum of 22 players, of which at least 6 must be occupied by sub-23s. In addition, two years of personal maturation can make a difference in terms of the future expectations of each player.

Inclusion criteria for participant groups in this study were: (i) a background of  $\geq 10$  years of periodized training and federated competition, (ii) not have or have suffered a serious injury or chronic pain in the past two seasons and no existence of neuropsychological impairment that could affect the response of questionnaires, (iii) existence of medical problems, (iv) federated soccer players in the third division RFEF in 2022-2023 season, (v) complete and sign the consent form and (vi) respond all questionnaires.

### Design and procedures

#### Experimental Approach to the Problem

The present study was descriptive with a cross-sectional design and was conducted between February and March of 2023. Semi-professional soccer players usually trained at least four times a week in various clubs of same category (90 min  $\approx$  per session) and played one match a week. The training sessions included a warm-up, main part, and cooldown.

All soccer players were informed of the main purpose of the study and completed and signed an informed consent form before completing the questionnaire. The athletes were treated according to the guidelines of the American Psychological Association, which ensured the anonymity of the participants' responses. Furthermore, the study was conducted in accordance with the ethical principles of the

Helsinki Declaration on Human Research and was approved by the local university scientific committee (code: 2021/64).

### Measures

The following measures were used:

(A) Perfectionism: The Spanish version of the Frost Multidimensional Perfectionism Scale (FMPS) (Frost et al., 1990); Spanish version by Carrasco et al. (2009), was used to measure dimensions of perfectionism. The questionnaire includes 35 items that create the 6 subscales of perfectionism proposed by (Frost et al., 1990), with 9 items measuring the dimension Concern Over Mistakes (CM, e.g. If I fail at work/school, I am a failure as a person), 7 items measuring Personal Standards (PS), 5 items to assess Parental Expectations (PE), 4 items assessing Parental Criticism (PC, e.g. As a child, I was punished for doing things less than perfectly), 4 items for Doubts About Actions (DAA) and 6 items assessing Organization (ORG). All items were answered on a 5-point Likert-type scale from 1=hardly ever to 5=always.

(B) Passion was assessed using the Spanish version of the Passion Scale (Chamarro et al., 2015; Marsh et al., 2013). Consisting of two six-point subscales, the scale measures obsession and harmonious passion for an activity. It also included five additional individual criteria to determine if participants' engagement with the event met enthusiasm. They are: time (time spent on the activity), liking (favorite for the activity), value (degree to which the activity is appreciated), passion (activity perceived as passion), and identity (activity perceived as passion). part of one's identity), although the latter was not included in previous editions. Each question was scored using a 5-point Likert scale (1=strongly disagree; 5=strongly agree). A higher score reflects a higher level of passion. Alpha scores of 0.79 for Obsessive Passion and 0.84 for Harmonious Passion reflect the high internal consistency of the two subscales.

### Procedure

Evaluation protocols were available online (Google Forms®, Google LTD., USA). Participants were asked to take measurements with their mobile phones. They received information about the study, their rights as participants and questions such as the confidentiality of their answers and their proprietary scientific use. They can only access the survey with their consent. Participants were neither compensated nor given feedback. Data were collected between February and March 2022.

### Statistical Analysis

Descriptive statistics were calculated for each variable. Before any parametric statistical analysis were performed, the assumption of normality and homoscedasticity were tested with the Kolmogorov-Smirnov and Levene's tests, respectively. A paired sample t-test was used for determining differences as a repeated measures analysis (U23 Group and >23 Group). Cohen's *d* was the effect size indicator. To interpret the magnitude of the effect size, we adopted the following criteria:  $d \leq 0.20$ , small;  $d \leq 0.50$ , medium; and  $d \leq 0.80$ , large. Pearson's correlation coefficient *r* was used to examine the relationship between each one of the six

subdimensions of perfectionism and the two components of passion. To interpret the magnitude of these correlations, the following criteria was adopted: Trivial:  $\leq 0.10$ ; small: 0.10 to 0.29; moderate: 0.30 to 0.49; large: 0.50 to 0.69; very large: 0.70 to 0.89; almost perfect:  $\geq 0.90$ . Multiple regression analysis was used to model the prediction of passion from the remaining variables. In this regression analysis, all variables were examined separately. Data were analyzed using Statistica software (version 13.3; Statsoft, Inc., USA).

Normality and homoscedasticity assumptions were tested using the Kolmogorov-Smirnov and Levene's tests, respectively, before performing parametric statistical analyses. Differences were determined using a paired-sample t-test as a repeated measures analysis (U23 subgroup and >21 subgroup). Cohen's *d* is an indicator of effect size (Cohen, 1992). To account for the magnitude of effect sizes, we used the following criteria:  $d \leq 0.20$ , small;  $d \leq 0.50$ , medium; and  $d \leq 0.80$ , large. Pearson's correlation coefficient *r* was used to study the relationship among each of the six subdimensions of perfectionism and the two variables of passion. To account for the magnitude of these correlations, the following criteria were employed: insignificant:  $\leq 0.10$ ; small: 0.10 to 0.29; moderate: 0.30 to 0.49; large: 0.50 to 0.69; very large: 0.70 to 0.89; near-perfect:  $\geq 0.90$ . Passion prediction was modeled from the remaining variables using multiple regression analysis. The alpha outcomes were .79 for obsessive passion and .84 for harmonious passion, which show high internal consistency for both subscales. Appropriate psychometric characteristics have been reported for this scale.

## Results

A paired sample t-test was used for defining differences as a repeated measures analysis (U21 Group and U23 Group). Additionally, a t-test with data from the FMPS revealed significant differences in perfectionism global score  $p=0.001$ , concern over mistakes  $p=0.03$ , parental expectations  $p=0.01$ , parental criticism  $p=0.001$ , doubts about actions  $p=0.05$  and organization  $p=0.02$ . However, the dataset did not reveal significant differences between personal standards  $p=0.44$ . On the other hand, a t-test with data from the Passion Scale did not revealed significant differences in any of the variables from the questionnaire. See table 1, for more information.

If the results are observed in Figure 1 of the FMPS questionnaire, it is shown that the U21 group has higher values regarding the perfectionism scale in relation to the U23 group.

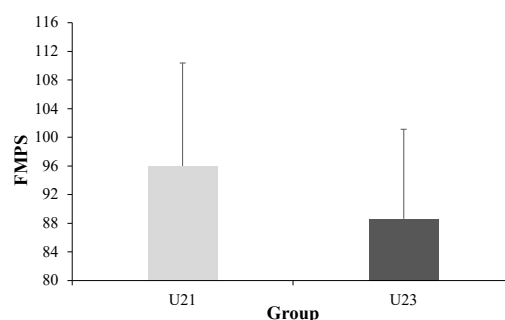


Fig. 1. Outcomes from FMPS and differences between both groups

Table 1. Descriptive statistics variable for each variable

	Total group (n=60)	U21 soccer players (n=30)	U23 soccer players (n=30)	
Variable (possible scores range)	Mean±SD [min-max]	Mean±SD [min-max]	Mean±SD [min-max]	t-test, Cohen's d
<b>Frost Multidimensional Perfectionism Scale</b>				
Perfectionism (35–135)	90.81±16.81 [48–142]	96.00±14.37 [63–122]	88.20±12.49 [62–111]	0.001**, 0.70
Concern over mistakes (9–45)	21.59±5.51 [9–35]	24.73±4.51 [16–35]	22.93±4.11 [17–35]	0.03*, 0.43
Personal standards (7–35)	25.10±3.85 [12–30]	25.03±3.86 [17–30]	22.86±4.26 [11–30]	0.44, 0.17
Parental expectations (5–25)	17.68±6.20 [9–37]	19.11±7.05 [9–37]	16.16±4.85 [9–34]	0.01*, 0.48
Parental criticism (4–20)	10.75±4.01 [5–21]	11.98±4.20 [5–21]	9.39±3.34 [5–16]	0.001**, 0.68
Doubts about actions (4–20)	6.45±2.71 [4–15]	6.93±3.04 [4–15]	5.89±2.20 [4–12]	0.05*, 0.39
Organization (6–30)	9.23±3.11 [4–19]	10.00±3.29 [4–19]	8.48±2.73 [4–16]	0.02*, 0.50
<b>Passion Scale</b>				
Harmonious passion (6–30)	35.01±4.92 [12–42]	39.76±4.80 [19–42]	34.39±6.07 [9–42]	0.92, 0.07
Obsessive passion (6–30)	21.76±7.46 [6–40]	22.82±7.70 [7–38]	20.34±7.26 [6–40]	0.15, 0.33
Time (1–7)	4.46±1.67 [1–7]	4.42±1.76 [1–7]	4.39±1.61 [1–7]	0.96, 0.01
Liking (1–7)	6.56±0.71 [4–7]	6.62±0.65 [5–7]	6.50±0.76 [4–7]	0.41, 0.16
Value (1–7)	6.15±1.08 [2–7]	6.18±0.96 [4–7]	6.05±1.21 [2–7]	0.64, 0.12
Passion (1–7)	6.15±1.15 [2–7]	6.29±0.98 [3–7]	6.00±1.28 [2–7]	0.1, 0.25
Identity (1–7)	5.85±1.18 [2–7]	5.98±1.05 [3–7]	5.71±1.29 [2–7]	0.22, 0.23

\* Denotes significance at  $p < 0.05$ . and \*\* denotes significance at  $p < 0.01$

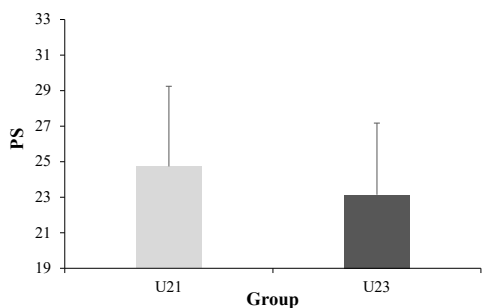


Fig. 2. Outcomes from Personal Standards dimension (FMPS) and differences between both groups

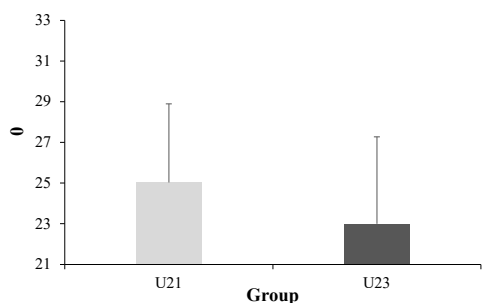


Fig. 3. Outcomes from Organization dimension (FMPS) and differences between both groups

As well as, in the results obtained in several of the dimensions, serving as an example the dimension of Personal Standards (Figure 2) and Organization (Figure 3), where the values of the U21 participants show a greater relevance compared to the U23 players.

## Discussion

The aim of this study was to analyze possible differences in perfectionism and passion between U23 and U21 semi-professional soccer players, along with to analyze the relationship between some dimensions in these groups.

The participants were shown to be a heterogeneous group in both perfectionism and passion, with moderate perfectionistic characteristics, excepting for the personal standards subscale, in which the opposite trend is found. According to the outcomes obtained, the U21 group shows significant values in terms of the level of perfectionism. This may be due, following (Bourke, 2003), U21 soccer players are generally in the early stages of their professional careers with the greatest need to do each of their sports interventions perfectly, while U23 soccer players have more experience and may be or next to their prime of their careers having a somewhat less uncertain future. The developmental stage can influence the pressures, expectations, and mindset related to perfectionism (Dunn et al., 2020; Fleming et al., 2023).

In relation to the scale on concern over mistakes in its positive dimension of adaptive perfectionism, it is again the U21 soccer players who show significant values in this variable. Results that would be in agreement with those obtained by (Livazović & Kuzmanović, 2022), in which it can be explained why U23 soccer players have had more time to develop coping strategies and resilience to deal with the challenges of the sport. They may have learned

from past experiences, both successes, and failures, which can shape their perspective on perfectionism (Gotwals & Tamminen, 2022). U21 players, on the other hand, may still be in the process of developing effective coping mechanisms (Junnarkar et al., 2021; MacIntyre et al., 2019).

Regarding the differences between U21 and older players, the t-test and Cohen's d, show some interesting results, as they show that U21 players are exposed to parental criticism, concern about mistakes and parental expectations, all negative sub-dimensions of perfectionism (maladaptive perfectionism). As mentioned earlier, concern about mistakes involves the fear of making mistakes and the possible negative consequences of those mistakes, while parental criticism refers to the parent's belief that they are perfect (Bonavolontà et al., 2021). This attribution seems logical, as U21 players are at a more critical stage of development in their personal and sporting lives than older players (Chamorro et al., 2019). In this line, parental control over the players appears to a greater extent in U21 participants. Being natural that the maturational level of these players is lower and their parents are more aware of their development and more involved in decision-making regarding older players (Kramers et al., 2022; Wachsmuth et al., 2023).

In this regard, the desire to fulfill family expectations may be augmented by the perception that a successful performance at this point will lead to professional success (Szalánczi et al., 2020). This would easily lead to a mentality of always improving and a sense of urgency to achieve greatness, both of these are associated with the perfectionism and passion scores. Conversely, older players may have a different perspective, as they fulfill their personal expectations, enjoy the sport, or maintain their current level, instead of concentrating on becoming professionals (Smith et al., 2020). Additionally, the capacity for harmonious passion to influence positive aspects of perfectionism (personal standards and the organization) is consistent, as both parties enjoy the activity and are intrinsically motivated by it (Konter et al., 2020). Harmonious passion is driven by activity satisfaction rather than reward or external pressure (Lopes & Vallerand, 2020) and is associated with improved wellbeing, positive affect, and reduced anxiety and depression (Vallerand & Verner-Filion, 2020).

On the other hand, significant results are shown in the values related to the positive variables of perfectionism, doubts about actions and organization. Young soccer players may experience doubts about their actions, decisions, and performances on the field (Vestberg et al., 2020). They may question whether they made the right pass, took the correct shot, or made the best decision in a game situation. These doubts can stem from a desire to perform well and meet their own high standards (Vestberg et al., 2020). Excessive doubts about actions can lead to hesitation, overthinking, and a lack of confidence on the field. It may hinder decision-making and prevent players from playing instinctively and freely (Soylu, 2021; Webb et al., 2020). It is important to help young players develop coping strategies to manage doubts about their actions. Teaching them to focus on the process rather than the outcome, encouraging self-reflection and learning from mistakes, and fostering a supportive and positive environment can help them navigate these doubts more effectively (De Muyneck et al., 2021). Those players

who prioritize organization may have a strong attention to detail in their training routines, ensuring they have all their equipment in place, and meticulously planning and preparing for games (Álvarez et al., 2019). While being organized can have its benefits, it is essential to strike a balance. Excessive focus on organization can lead to rigidity, anxiety, and a fear of deviating from their planned routines. It can also create additional pressure and stress if they perceive any disruption to their organized approach as a threat to their performance (Panza et al., 2020).

Maladaptive perfectionism is characterized by setting unrealistic goals and a minimum of tolerance for failure, while adaptive perfectionism is able to establish high standards that are also malleable, disregarding small imperfections while still achieving a sense of fulfillment and satisfaction when the standards are achieved (Malivoire et al., 2019). Following these theoretical approaches, there was no association between the maladaptive aspects of perfectionism and obsessive passion, nor between the adaptive aspects of perfectionism and harmonious passion. This is not common and congruent with previous studies (Schellenberg et al., 2023; Vallerand & Verner-Filion, 2020).

## Conclusions

This study highlighted the importance of addressing maladaptive perfectionism in interventions and support programs for young athletes (U21 and U23). Strategies such as promoting a growth mindset, encouraging self-compassion, and fostering a supportive and mastery-oriented environment have been suggested to help athletes manage perfectionistic tendencies and enhance their well-being and performance. In particular, the recognition of differences between age groups (U21 and U23) can contribute to a more effective selection of interventions and strategies to solve the specific problems of athletes at different stages of development. Overall, these findings have a tendency to provide the basis for the creation of psychological programs that can enhance the health and performance of soccer players. This research has contributed to a greater understanding of the perils of perfectionism and has shaped interventions and support strategies in the sporting domain.

Awareness of the value of recognizing this behavioral pattern in players could help to prevent or mitigate the development of maladaptive perfectionistic patterns. This would also facilitate the detection of players who have already experienced adverse effects of perfectionism, so training sessions can be reduced and more effective ways to implement prevention strategies can be employed (e.g., promoting a healthier relationship with sports and competition during training). Additionally, when patterns of passion that are harmonious are detected, coaches, parents, health psychologists and educators should be aware of the potential associations with adaptive perfectionism, this will help to promote dedication and a healthy commitment to soccer, which will facilitate the enjoyment and motivation of players.

## Conflict of Interest

The researchers affirm that there were no financial or commercial ties that might be seen as creating a conflict of interest during the research's conduct.

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## Data Availability Statement

The corresponding author will freely make the raw data used to support this article's conclusions available.

## References

- Peña-González, I., Javaloyes, A., Sarabia, J. M., & Moya-Ramón, M. (2021). Relative age-related differences between different competitive levels and field positions in young soccer players. *Research in Sports Medicine*, 29(3), 254-264. <https://doi.org/10.1080/15438627.2020.1853540>
- Huertas, F., Ballester, R., Gines, H. J., Hamidi, A. K., Moratal, C., & Lupiáñez, J. (2019). Relative age effect in the sport environment. Role of physical fitness and cognitive function in youth soccer players. *International Journal of Environmental Research and Public Health*, 16(16). <https://doi.org/10.3390/ijerph16162837>
- Alesi, M., Gómez-López, M., Borrego, C. C., Monteiro, D., & Granero-Gallegos, A. (2019). Effects of a motivational climate on psychological needs satisfaction, motivation and commitment in teen handball players. *International Journal of Environmental Research and Public Health*, 16(15). <https://doi.org/10.3390/ijerph16152702>
- Champ, F. M., Nesti, M. S., Ronkainen, N. J., Tod, D. A., & Littlewood, M. A. (2020). An Exploration of the Experiences of Elite Youth Footballers: The Impact of Organizational Culture. *Journal of Applied Sport Psychology*, 32(2). <https://doi.org/10.1080/10413200.2018.1514429>
- Price, A., Collins, D., Stoszowski, J., & Pill, S. (2020). Strategic Understandings: An Investigation of Professional Academy Youth Soccer Coaches' Interpretation, Knowledge, and Application of Game Strategies. *International Sport Coaching Journal*, 7(2). <https://doi.org/10.1123/iscj.2019-0022>
- Drigas, A., Dede, D. E., & Dedes, S. (2020). Mobile and other applications for mental imagery to improve learning disabilities and mental health. *International Journal of Computer Science Issues (IJCSI)*, 17(4), 18-23.
- Fleming, D. J. M., Dorsch, T. E., & Dayley, J. C. (2023). The mediating effect of parental warmth on the association of parent pressure and athlete perfectionism in adolescent soccer. *International Journal of Sport and Exercise Psychology*, 21(3), 491-507. <https://doi.org/10.1080/1612197X.2022.2058584>
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5). <https://doi.org/10.1007/BF01172967>

- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences, 14*(1). [https://doi.org/10.1016/0191-8869\(93\)90181-2](https://doi.org/10.1016/0191-8869(93)90181-2)
- Lin, S., & Muenks, K. (2022). Perfectionism profiles among college students: A person-centered approach to motivation, behavior, and emotion. *Contemporary Educational Psychology, 71*. <https://doi.org/10.1016/j.cedpsych.2022.102110>
- Sederlund, A. P., Burns, L. R., & Rogers, W. (2020). Multidimensional models of perfectionism and procrastination: Seeking determinants of both. *International Journal of Environmental Research and Public Health, 17*(14). <https://doi.org/10.3390/ijerph17145099>
- Seong, H., Lee, S., & Chang, E. (2021). Perfectionism and academic burnout: Longitudinal extension of the bifactor model of perfectionism. *Personality and Individual Differences, 172*. <https://doi.org/10.1016/j.paid.2020.110589>
- Flett, G. L., & Hewitt, P. L. (2014). The perils of perfectionism in sports<sup>3</sup> revisited: Toward a broader understanding of the pressure to be perfect and its impact on athletes and dancers. *International Journal of Sport Psychology, 45*(4). <https://doi.org/10.7352/IJSP2014.45.395>
- Flett, G. L., & Hewitt, P. L. (2005). The perils of perfectionism in sports and exercise. *Current Directions in Psychological Science, 14*(1). <https://doi.org/10.1111/j.0963-7214.2005.00326.x>
- Freire, G. L. M., Fiorese, L., Moraes, J. F. V. N. d., Codonhato, R., Oliveira, D. V. de, & Nascimento Junior, J. R. de A. d. (2022). Do Perfectionism Traits Predict Team Cohesion and Group Conflict Among Youth Athletes? *Perceptual and Motor Skills, 129*(3). <https://doi.org/10.1177/00315125221087025>
- Olmedilla, A., Aguilar, J. M., Ramos, L. M., Trigueros, R., & Cantón, E. (2022). Perfectionism, mental health, and injuries in women footballers. *Revista de Psicología Del Deporte, 31*(1).
- Vallerand, R. J. (2016). The Dualistic Model of Passion: Theory, Research, and Implications for the Field of Education. In *Building Autonomous Learners*. [https://doi.org/10.1007/978-981-287-630-0\\_3](https://doi.org/10.1007/978-981-287-630-0_3)
- Vallerand, R. J. (2010). Chapter Three: On passion for life activities: The dualistic model of passion. *Advances in Experimental Social Psychology, 42*. [https://doi.org/10.1016/S0065-2601\(10\)42003-1](https://doi.org/10.1016/S0065-2601(10)42003-1)
- Vallerand, R. J. (2015). The psychology of passion: A dualistic model. In *Series in positive psychology*.
- Clohessy, T., Whelan, E., & Paradis, K. F. (2021). Does passion for physical activity spillover into performance at work? Examining the direct and indirect effects of passion and life satisfaction on organisational performance and innovativeness. *International Journal of Sport and Exercise Psychology, 19*(5). <https://doi.org/10.1080/1612197X.2020.1766537>
- Konter, E., Kueh, Y. C., & Kuan Pei Ern, G. (2020). Relationship between passion and courage among the experienced male soccer players. *Malaysian Journal of Medical Sciences, 27*(4). <https://doi.org/10.21315/mjms2020.27.4.8>
- St-Cyr, J., Chénard-Poirier, L. A., Dufresne, A., & Vallerand, R. J. (2023). The Role of Passion in Self-Oriented Versus Team-Oriented Decision-Making in Team Sports. *International Journal of Environmental Research and Public Health, 20*(3). <https://doi.org/10.3390/ijerph20032626>
- Jordana, A., Ramis, Y., Chamorro, J. L., Pons, J., Borrueco, M., De Brandt, K., & Torregrossa, M. (2023). Ready for Failure? Irrational Beliefs, Perfectionism and Mental Health in Male Soccer Academy Players. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 41*(2), 454-477. <https://doi.org/10.1007/s10942-022-00491-1>
- Smith, E. P., Hill, A. P., Mallinson-Howard, S. H., & Gustafsson, H. (2020). Stress, Burnout, and Perfectionism in Soccer Players. In *The Psychology of Soccer*. <https://doi.org/10.4324/9781003005568-24>
- Woods, S., Dunne, S., Gallagher, P., & McNicholl, A. (2022). A systematic review of the factors associated with athlete burnout in team sports. *International Review of Sport and Exercise Psychology, 1-41*. <https://doi.org/10.1080/1750984X.2022.2148225>
- Chamorro, J. L., Sánchez-Oliva, D., & Pulido, J. J. (2019). The critical transition from junior to elite football: Resources and barriers. In *Football Psychology: From Theory to Practice*. <https://doi.org/10.4324/9781315268248-25>
- Pedraza-Ramirez, I., Musculus, L., Raab, M., & Laborde, S. (2020). Setting the scientific stage for esports psychology: A systematic review. *International Review of Sport and Exercise Psychology, 13*(1), 319-352. <https://doi.org/10.1080/1750984X.2020.1723122>
- De Oliveira, L. P., Vissoci, J. R. N., Do Nascimento Junior, J. R. A., Ferreira, L., Vieira, L. F., Da Silva, P. N., Cheuczuk, F., & Vieira, J. L. L. (2015). The impact of perfectionism traits on motivation in highperformance soccer athletes. *Revista Brasileira de Cineantropometria e Desempenho Humano, 17*(5). <https://doi.org/10.5007/1980-0037.2015v17n5p601>
- Carrasco, Á., Belloch, A., & Perpiñá, C. (2009). La evaluación del perfeccionismo: utilidad de la Escala Multidimensional de Perfeccionismo en población española. *Análisis y Modificación de Conducta, 35*(152). <https://doi.org/10.33776/amc.v35i152.1225>
- Chamarro, A., Penelo, E., Fornieles, A., Oberst, U., Vallerand, R. J., & Fernández-Castro, J. (2015). Psychometric properties of the Spanish version of the Passion Scale. *Psicothema, 27*(4). <https://doi.org/10.7334/psicothema2015.80>
- Marsh, H. W., Vallerand, R. J., Lafrenière, M. A. K., Parker, P., Morin, A. J. S., Carbonneau, N., Jowett, S., Bureau, J. S., Fernet, C., Guay, F., Abduljabbar, A. S., & Paquet, Y. (2013). Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric invariance over different activities and languages. *Psychological Assessment, 25*(3). <https://doi.org/10.1037/a0032573>
- Cohen, J. (1992). Quantitative Methods in Psychology. *Psychological Bulletin, 112*(1), 155-159.
- Bourke, A. (2003). The dream of being a professional soccer player: Insights on Career Development Options of Young Irish Players. *Journal of Sport & Social Issues, 27*(4). <https://doi.org/10.1177/0193732503255478>
- Dunn, J. G. H., Gotwals, J. K., Dunn, J. C., & Lizmore, M. R. (2020). Perfectionism, pre-competitive worry,

- and optimism in high-performance youth athletes. *International Journal of Sport and Exercise Psychology*, 18(6). <https://doi.org/10.1080/1612197X.2019.1577900>
- Fleming, D. J. M., Madigan, D. J., Mallinson-Howard, S. H., & Hill, A. P. (2023). A test of the 2 × 2 Model of Perfectionistic Pressure in youth sport. *Psychology of Sport and Exercise*, 66. <https://doi.org/10.1016/j.psychsport.2023.102391>
- Livazović, G., & Kuzmanović, K. (2022). Predicting adolescent perfectionism: The role of socio-demographic traits, personal relationships, and media. *World Journal of Clinical Cases*, 10(1). <https://doi.org/10.12998/wjcc.v10.i1.189>
- Gotwals, J. K., & Tamminen, K. A. (2022). Intercollegiate perfectionistic athletes' perspectives on success and failure in sport. *Journal of Applied Sport Psychology*, 34(1). <https://doi.org/10.1080/10413200.2020.1740826>
- Junnarkar, M., Sahni, S. P., & Gill, S. (2021). *Resilience and Well-Being in Sports. In Emotion, Well-Being, and Resilience Theoretical Perspectives and Practical Applications*.
- MacIntyre, T. E., Walkin, A. M., Beckmann, J., Calogiuri, G., Gritzka, S., Oliver, G., Donnelly, A. A., & Warrington, G. (2019). An exploratory study of extreme sport athletes' nature interactions: From well-being to pro-environmental behavior. *Frontiers in Psychology*, 10(MAY). <https://doi.org/10.3389/fpsyg.2019.01233>
- Bonavolontà, V., Cataldi, S., Latino, F., Carvutto, R., De Candia, M., Mastroianni, G., Messina, G., Patti, A., & Fischetti, F. (2021). The role of parental involvement in youth sport experience: perceived and desired behavior by male soccer players. *International Journal of Environmental Research and Public Health*, 18(16). <https://doi.org/10.3390/ijerph18168698>
- Kramers, S., Thrower, S. N., Steptoe, K., & Harwood, C. G. (2023). Parental strategies for supporting children's psychosocial development within and beyond elite sport. *Journal of Applied Sport Psychology*, 35(3), 498-520. <https://doi.org/10.1080/10413200.2022.2043486>
- Wachsmuth, S., Feichtinger, P., Bartley, J., & Höner, O. (2023). Psychological characteristics and future success: A prospective study examining youth soccer players at different stages within the German talent development pathway. *Journal of Applied Sport Psychology*, 1-25. <https://doi.org/10.1080/10413200.2023.2224868>
- Szalánczi, Z., Kovács, B., & Bácsnébába, É. (2020). Socializing effect of child soccer players on their parents. *Journal of Physical Education and Sport*, 20(6). <https://doi.org/10.7752/jpes.2020.06460>
- Lopes, M., & Vallerand, R. J. (2020). The role of passion, need satisfaction, and conflict in athletes' perceptions of burnout. *Psychology of Sport and Exercise*, 48, 101674. <https://doi.org/10.1016/j.psychsport.2020.101674>
- Vallerand, R. J., & Verner-Filion, J. (2020). Theory and Research in Passion for Sport and Exercise. *In Handbook of Sport Psychology*. <https://doi.org/10.1002/9781119568124.ch11>
- Vestberg, T., Jafari, R., Almeida, R., Maurex, L., Ingvar, M., & Petrovic, P. (2020). Level of play and coach-rated game intelligence are related to performance on design fluency in elite soccer players. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-66180-w>
- Soylu, Y. (2021). Comparison of emotional intelligence levels of soccer players according to age and playing position. *Acta Gymnica*, 51. <https://doi.org/10.5507/ag.2021.008>
- Webb, T., Dicks, M., Brown, D. J., & O'Gorman, J. (2020). An exploration of young professional football players' perceptions of the talent development process in England. *Sport Management Review*, 23(3). <https://doi.org/10.1016/j.smr.2019.04.007>
- De Muynck, G. J., Morbée, S., Soenens, B., Haerens, L., Vermeulen, O., Vande Broek, G., & Vansteenkiste, M. (2021). Do both coaches and parents contribute to youth soccer players' motivation and engagement? An examination of their unique (de)motivating roles. *International Journal of Sport and Exercise Psychology*, 19(5). <https://doi.org/10.1080/1612197X.2020.1739111>
- Álvarez, O., Castillo, I., Molina-García, V., & Tomás, I. (2019). Transformational leadership, task-involving climate, and their implications in male junior soccer players: A multilevel approach. *International Journal of Environmental Research and Public Health*, 16(19). <https://doi.org/10.3390/ijerph16193649>
- Panza, M. J., Graupensperger, S., Agans, J. P., Doré, I., Vella, S. A., & Evans, M. B. (2020). Adolescent Sport Participation and Symptoms of Anxiety and Depression: A Systematic Review and Meta-Analysis. *Journal of Sport and Exercise Psychology*, 42(3), 201-218. <https://doi.org/10.1123/jsep.2019-0235>
- Malivoire, B. L., Kuo, J. R., & Antony, M. M. (2019). An examination of emotion dysregulation in maladaptive perfectionism. *Clinical Psychology Review*, 71, 39-50. <https://doi.org/10.1016/j.cpr.2019.04.0066>
- Schellenberg, B., Verner-Filion, J., Gaudreau, P., & Chichekian, T. (2023). The quadripartite approach to passion in sport: A prospective and cross-domain analysis with intercollegiate student-athletes. *International Journal of Sport and Exercise Psychology*, 1-18. <https://doi.org/10.1080/1612197X.2023.2197910>

## ВІДМІННОСТІ У ПЕРФЕКЦІОНІЗМІ ТА ЗАХОПЛЕННІ МІЖ НАПІВПРОФЕСІЙНИМИ ФУТБОЛІСТАМИ ВІКОМ ДО 21 ТА ДО 23 РОКІВ

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Авторський вклад: А – дизайн дослідження; В – збір даних; С – статаналіз; D – підготовка рукопису; E – збір коштів

Реферат. Стаття: 9 с., 1 табл., 3 рис., 53 джерела.

**Мета дослідження.** Мета цього дослідження полягає в тому, щоб проаналізувати відмінності в перфекціонізмі та захопленні, а також те, як ці змінні взаємодіють і можуть впливати на результативність у футболістів віком до 21 та до 23 років.

**Матеріали та методи.** Загалом у дослідженні взяли участь 60 здорових напівпрофесійних футболістів (вік:  $21,57 \pm 1,95$  року; зріст:  $179,76 \pm 5,79$  см). Учасників розподілили на дві рівні групи: одну з гравцями молодше 21 року, а другу з гравцями віком 21–23 роки. Це дослідження було описовим із перехресним планом дослідження, і в ньому використовували опитувальники «Багатовимірна шкала перфекціонізму Фроста» (FMPS) та «Шкала захоплення».

**Результати.** Для визначення відмінностей використовували t-критерій Стьюдента для парних вибірок як аналіз повторних вимірювань (група віком до 21 року та група віком до 23 років). Крім того, завдяки застосуванню t-критерію Стьюдента з даними опитувальника FMPS були виявлені статистично значущі відмінності в загальній оцінці рівня перфекціонізму, стурбованості щодо помилок, батьківських очікувань, батьківській критиці, сумнівах щодо дій та організації. Було показано, що учасники являють собою гетерогенну групу як за перфекціонізмом, так і за захопленням, із помірними перфекціоністськими характеристиками, за винятком підшкали особистих стандартів, у якій спостерігається протилежна тенденція. Відповідно до отриманих результатів, група віком до 21 року демонструє значні величини рівня перфекціонізму.

**Висновки.** Це дослідження підкреслило важливість усунення неадаптивного перфекціонізму у втручаннях і програмах підтримки для спортсменів. Були запропоновані такі стратегії, як сприяння психології зростання, захоплення співчуття до себе та сприяння розвитку сприятливого й орієнтованого на майстерність середовища, щоб допомогти спортсменам керувати перфекціоністськими тенденціями та покращувати своє самопочуття та результативність.

**Ключові слова:** адаптивний перфекціонізм, неадаптивний перфекціонізм, гармонійне захоплення, футболісти, віком до 23 років.

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