Motivation, Anxiety, Life Satisfaction and Adherence in Spanish Adolescent Soccer Players

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Abstract

The global rise in sedentary lifestyles and deteriorating mental health among youth presents a significant concern. Sport motivation in young individuals is recognized as a catalyst for fostering a positive attitude towards regular physical activity and sports participation. However, anxiety contributes to a lack of motivation for engaging in these activities. Life satisfaction, a component of subjective well-being, in the context of sports, has the potential to enhance an individual's quality of life by offering a stabilizing activity that promotes achievement, success, and happiness. The primary objective of this study was to analyse the overall life satisfaction of young soccer players and to understand its impact on their emotional well-being and sporting performance, considering the motivational factors and anxiety that influence them. A descriptive cross-sectional study was conducted involving 495 young soccer players from Spain, aged 11 to 18 years. The sample comprised 285 boys and 210 girls, with a mean age of 15 years. Significant differences were observed across all items of the Satisfaction with Life Scale (SWLS) based on gender (with higher scores in boys) and academic cycle (with higher scores in the first cycle). On the State-Trait Anxiety Inventory (STAI), gender differences were noted in Trait Anxiety, which was higher in females. Additionally, significant differences were found in both State Anxiety and Trait Anxiety when considering the academic cycle, with second-cycle students exhibiting lower levels of anxiety. Regarding the dimensions of the Sport Motivation Scale/Emotional Measures of Development (SMS/EMD), significant differences were identified in intrinsic motivation, extrinsic motivation, and amotivation based on gender, with boys scoring higher than girls. In terms of demographic location, only intrinsic motivation for experiencing stimuli was higher in urban settings, while amotivation was more prevalent in rural areas. Cycle differences were observed solely in the intrinsic motivation dimension, favouring second-cycle students. Furthermore, an inverse correlation was noted between anxiety and amotivation, indicating that as anxiety and amotivation increase, life satisfaction tends to decrease. This research provides valuable insights into how anxiety and motivation influence the lives of young athletes. The findings indicate that increased demotivation and anxiety are associated with decreased life satisfaction among the subjects studied. This information can be instrumental for coaches and the broader environment of young athletes, enabling them to address these aspects effectively. By fostering a better understanding of the impact of anxiety and motivation, stakeholders can enhance athletes' mental health and ensure sustained adherence to sports, thereby promoting a high level of life satisfaction.

Keywords: Subjective Well-Being, Sport Motivation, Amotivation, Anxiety, Football Player, Adolescence, Adherence.

Introduction

Understanding and enhancing motivation is a central focus in both psychology and sports psychology (Roberts et al., 2007). Dörnyei and Ushioda (2021) define motivation as the driving force behind an individual's decisions to engage in particular actions. Roberts et al. (2007) posits that motivation may be perceived as either a measure of coincidence that enhances performance through attitude, a matter of positive thinking (Scheier &

Carver, 1993), or an inherent trait or genetic predisposition (Scarr, 1966). Motivation is extensively studied in sports psychology due to its profound influence on human behaviour (Gutiérrez et al., 2021) and its critical role in sports, including soccer (Castro-Sánchez, Zurita-Ortega, Ubago-Jiménez, et al., 2018). It is also recognized as a key determinant of athletic success (Gould et al., 2002) and contributes significantly to athletes' persistence in training and competition (Vallerand, 2007). Consequently, motivational processes in athletes have garnered

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substantial attention for their association with various outcomes, including technical-tactical performance, satisfaction with performance, adherence to or discontinuation of physical activity, and the development of precompetitive anxiety (Appleton & Duda, 2016; Castro-Sánchez, Zurita-Ortega, Chacón-Cuberos, et al., 2018; Fry et al., 2021). In this context, within the study of motivation, authors such as Legault (2020) distinguish between intrinsic and extrinsic motivation.

Intrinsic motivation (IM) refers to engaging in activities for their inherent interest and enjoyment (Deci & Ryan, 2000). Neuroscience research by Blakemore and Mills (2014) demonstrates that individuals' engagement with the social world and community involvement often involves elements of the self, such as IM. Conversely, extrinsic motivation, as defined by Ryan and Deci (2020), pertains to behaviours driven by external rewards rather than inherent satisfaction. In the realm of sports, contemporary motivation studies are often framed within Achievement Goals Theory (AGT). This theory posits that individuals set their goals based on their perceptions of their own abilities (Wahl-Alexander et al., 2018). According to AGT, coaches act as social agents who can influence athletes' behaviours by fostering specific motivational environments (Gjesdal et al., 2019). Within this framework, coaches can create either ego-oriented or task-oriented climates (Ingrell et al., 2019). When a coach emphasizes rewarding effort and personal growth, assigns significant roles to each athlete, listens to their needs, and fosters positive relationships among team members, athletes perceive this as a task-oriented environment. In contrast, in an ego-oriented environment, the coach focuses more on competitive aspects, highlights and punishes mistakes, prioritizes outcomes over individual development, and shows less interest in promoting camaraderie among teammates (Reinboth & Duda, 2004). A key element of this theory is the motivational climate, which, according to Avci et al. (2018), encompasses the set of indicators perceived by individuals within their sports environment, influencing how success or failure is defined.

In the present research, the role of sports motivation in adolescence is particularly emphasized. Numerous researchers, including Ivanova and Korostelev (2019), have investigated sports motivation, seeking to understand and explain it as a catalyst for developing a positive attitude towards physical activity and a healthy lifestyle, facilitating the transition from extrinsic motivation to IM. In the sports context, athletes need to master physical, technical, tactical, and psychological skills to succeed in sports such as soccer (Menegassi et al., 2018). Research by Bognár et al. (2009) highlights the significant role of IM in the success of young athletes. However, EscamillaFajardo et al. (2020) found that

adolescents in their study population exhibited higher levels of extrinsic motivation, likely influenced by the competitive nature of sports, as these athletes focused on defeating opponents or achieving personal performance improvements.

Given this perspective, it can be inferred, as noted by Sheehan et al. (2018), that psychological monitoring of student-athletes is an effective tool for identifying motivational factors that impact their well-being and performance. Regarding subjective well-being and satisfaction, these have been extensively studied since the last decade of the 21st century due to their significance in mental health and overall development (Gutiérrez et al., 2021). Various scholars have sought to define "subjective well-being"; for instance, Martín (2002) describes it as an individual's positive evaluation of their own life. Fernández and Grandmontagne (2011) elaborates on this by identifying three components of subjective well-being: life satisfaction, positive affect, and negative affect. In the sports context, subjective well-being has the potential to enhance an individual's quality of life by providing a normalizing activity that fosters achievement, success, and satisfaction (Soundy et al., 2015).

Moreover, sports psychology has extensively explored motivational processes and mental aspects such as anxiety and emotional intelligence to understand their relationship with sports performance (Selmi et al., 2018; Sheehan et al., 2018). The literature indicates that mental health issues such as anxiety, mood disorders, depression, and sleep disorders persist in elite sports and are of significant interest to the sports environment, including athletes, as they can impact performance (Sheehan et al., 2018). Studies, such as those by Menegassi et al. (2018), demonstrate that athletes with higher levels of autonomous motivation are more likely to experience lower somatic anxiety compared to those who rely on extrinsic motivation. This is because autonomous motivation enhances self-confidence and reduces anxiety. Additionally, self-determined forms of motivation are frequently associated with better mental health outcomes (Vella et al., 2021).

Numerous studies have examined the influence of motivation on athletes from various perspectives (Menegassi et al., 2018; Orbach et al., 2021; Roberts, 1982; Roberts & Treasure, 2012; Roberts et al., 2007; Sheehan et al., 2018; Vella et al., 2021), as well as the impact of satisfaction and subjective well-being on athletes (Castro-Sánchez et al., 2019; Castro-Sánchez, Zurita-Ortega, Ubago-Jiménez, et al., 2018). To succeed in sports such as soccer, athletes must develop their physical, technical, tactical, and psychological abilities. The inherently unpredictable and uncertain environment of soccer

necessitates that players maintain a tactical-strategic mindset and respond swiftly to emerging challenges (Matias & Greco, 2010). Decision-making in soccer, which is based on cognitive processes, can be adversely affected by high levels of cognitive worry or low levels of self-determined motivation (Menegassi et al., 2018). Despite this, there has been limited research on the correlation between satisfaction, motivation, and anxiety in young soccer players. Consequently, the objective of this study is to analyse the life satisfaction of young soccer players and to understand how anxiety and motivation influence it.

Materials and Methods

Desing

A cross-sectional descriptive study was conducted involving a large cohort of boys and girls who play soccer **Table 1**

Demographic Characterization

in various clubs across a city in the province of Cáceres, Extremadura.

Participants

The sample comprised young soccer players aged 11 to 18, totalling 495 participants, of whom 285 were boys and 210 were girls, with a mean age of 15 years. The demographic analysis revealed that only 128 participants resided in rural areas. The sample was categorized according to academic cycles: the first cycle included the first three years of high school, and the second cycle encompassed the fourth year. Consequently, 207 participants were in the first cycle, while 288 were in the second cycle of Compulsory Secondary Education (CSE). Additionally, data on soccer practice frequency and duration were collected, showing an average of 2.45 practice days and 2.26 hours per week.

| Variable | Categories | N | % |
|-----------------------|-----------------|-----|-------|
| C1 | Male | 285 | 57.6 |
| Gender | Female | 210 | 42.4 |
| Province and out | Rural | 128 | 25.85 |
| Environment | Urban | 367 | 74.15 |
| Educational Code | First | 207 | 41.8 |
| Educational Cycle | Second | 288 | 58.2 |
| | One day | 48 | 9.7 |
| Farmer of David | Two-Three days | 213 | 43.0 |
| Frequency of Practice | Four-Five days | 198 | 40.0 |
| | Six-Seven days | 36 | 7.3 |
| | 1 hour | 120 | 24.2 |
| II | Two-Three hours | 201 | 40.6 |
| Hours Per week | Four-Five hours | 99 | 20.0 |
| | Six-Seven hours | 75 | 15.2 |

Note: N: Number; %: Percentage.

Instruments

questionnaire was designed, including sociodemographic items: gender, age, living environment, school attended, grade level, and the number of days and hours of soccer practice per week. To assess life satisfaction, the SWLS was employed, utilizing its Spanish version (Pons et al., 2002). The SWLS is a Likert-type scale consisting of five items, where participants indicate their level of agreement with each statement on a scale from "Strongly Disagree" (1) to "Strongly Agree" (5). The minimum possible score is 5, reflecting low satisfaction, while the maximum score is 25, indicating high satisfaction. The SWLS is a brief and easy-toadminister tool, appropriate for large-scale studies, providing a general measure of subjective well-being and serving as a broad indicator of life satisfaction in psychological and social research (Diener et al., 1985).

Another aspect to be examined in this study is the role of motivation and its impact on young soccer players. To assess this, the Sport Motivation Scale (SMS/EMD) (Vallerand, 2007) was employed, utilizing its Spanish version (Balaguer et al., 2007). This instrument comprises 28 items and is organized into seven subscales, each representing a specific type of motivation: IM (IM to know, IM for experiencing stimulation, IM for achieving things), extrinsic motivation (identified motivation, introjected motivation, external motivation), and amotivation. The SMS/EMD evaluates various types of motivation that can influence sports behaviour, offering valuable insights into self-determination and the quality of motivation within the sports context. The reliability of the instrument in Spanish samples is welldocumented (Balaguer et al., 2007). Responses are recorded using a 7-point scale.

To assess the anxiety levels of the sample participants, the State-Trait Anxiety Inventory (STAI-Trait) developed by Spielberger et al. (1983) was utilized in its Spanish adaptation (Spielberger et al., 2002). This instrument employs a Likert-type scale comprising 40 items, each offering four response options ranging from "Not at all" (0) to "Very much" (3). It evaluates both transient and stable anxiety, thereby providing a comprehensive assessment of an individual's anxiety. Research employing this tool, such as Spielberger's study in the sports context, has demonstrated strong reliability, with Cronbach's Alpha coefficients of (α = .93) for state anxiety items and (α = .90) for trait anxiety items (Johnson & Ivarsson, 2011).

Procedure

The data collection was conducted in a city within the province of Cáceres (Extremadura), targeting various sports teams with the administered questionnaire. To expand the sample size, additional outreach was made to a sports club affiliated with an educational institution where a significant number of students participate in soccer. Permission was obtained from the coaches, administrators, and educators at the institution, who were briefed about the study in person and assured of the questionnaire's complete anonymity. Furthermore, informed consent was required, with parents signing authorization forms for their children's participation in the research. The questionnaire was distributed online to the coaches and teachers, who then facilitated its completion by the students following the receipt of signed consents. The data collection phase extended over two months, from March to May 2023.

Statistical Analysis

The Kolmogorov-Smirnov test was initially employed to assess the normality of the data distribution, which is a prerequisite for selecting appropriate statistical tests. Given that the data did not meet the assumption of normality, nonparametric statistical methods were utilized. The Mann-Whitney U test was conducted to examine potential differences in the dimensions and scores across the three questionnaires, considering variables such as sex, environment, and educational cycle of the participants, with a confidence level of 95% (p < 0.05). Additionally, Spearman's Rho test was used to evaluate the strength of associations between life satisfaction (measured by the SWLS), motivation (assessed via the SMS/EMD), and anxiety (gauged with the STAI). The interpretation of Spearman's Rho was guided by the range proposed by Barrera (2014), where coefficients between 0.01 and 0.10 indicate a low correlation, between 0.11 and 0.50 denote a medium correlation, between 0.51 and 0.75 represent a strong correlation, between 0.76 and 0.90 signify a high correlation, and values above 0.91 are considered

indicative of a perfect correlation. Finally, Cronbach's Alpha was utilized to assess the reliability of the various instruments and their dimensions. According to Nunnally and Bernstein (1994), reliability coefficients between 0.60 and 0.70 are deemed acceptable, whereas values ranging from 0.70 to 0.90 are considered satisfactory.

Results

Table 2 displays the descriptive statistics for each item of the SWLS instrument, including mean, standard deviation, and the differences revealed by the Mann-Whitney U test. These differences are analysed with respect to gender, demographic location, and the participants' academic cycle. Significant differences were observed in all items with respect to gender and academic cycle. However, no statistically significant differences were identified based on the school environment. Overall, life satisfaction was higher among boys, those from urban environments, and students in the first cycle of CSE. Notably, significant differences were found solely with regard to gender and educational level. Table 3 presents the descriptive statistics for each dimension of the STAI, categorized by gender, demographic location, and academic cycle. The table includes the mean and standard deviation for each dimension.

Females scored higher than males on the Trait Anxiety dimension, whereas males had higher scores on the State Anxiety dimension. Significant gender-based differences were identified in Trait Anxiety, but no significant differences were found for State Anxiety. Additionally, no significant differences were observed for either anxiety variable based on the school environment. However, significant differences were found in both State Anxiety and Trait Anxiety across academic cycles, with students in the second cycle reporting higher scores. Table 4 presents the descriptive statistics for each dimension of the SMS/EMD, categorized by gender, demographic location, and academic cycle. It includes the mean and standard deviation for each dimension, as well as the p-values derived from the Mann-Whitney U test, which were used to analyse the differences between groups.

Furthermore, significant differences were observed in the IM, extrinsic motivation, and non-motivation dimensions based on gender, with boys scoring higher than girls. In terms of demographic location, higher values were found for IM related to experiencing stimulation in urban environments, while non-motivation scores were higher in rural areas. Differences were noted in the IM dimension across academic cycles, favouring students in the second cycle. To examine the relationships between each dimension, the Spearman's Rho test was employed, as detailed in Table

Table 2Descriptive Analyses and Differences in Each of the SWLS Items

| _ | | Gender | | | Environment | | | Educational Cycle | | |
|---|-------------|-------------|---------|-------------|-------------|------|-------------|--------------------------|---------|--|
| Items | Male M | Female M | | Rural M | Urban M | | First M | Second M | | |
| | (SD) | (SD) | Р | (SD) | (SD) | P | (SD) | (SD) | Р | |
| 1. In most things, my life is close to my ideal. | 5.62 (1.20) | 4.57 (1.48) | <0.01** | 5.25 (0.45) | 5.17 (1.44) | 0.54 | 5.49 (1.19) | 4.95 (1.53) | <0.01** | |
| 2. The conditions of my life are excellent. | 5.77 (1.17) | 5.00 (1.80) | <0.01** | 5.25 (1.35) | 5.45 (1.52) | 0.49 | 5.84 (1.16) | 5.16 (1.68) | <0.01** | |
| 3. I am satisfied with my life. | 5.84 (1.46) | 5.40 (1.55) | <0.01** | 6.00 (0.73) | 5.65 (1.53) | 0.93 | 5.90 (1.42) | 5.48 (1.55) | <0.01** | |
| 4. So far, I have achieved the things that are important to me in life. | 5.32 (1.25) | 4.94 (1.33) | <0.01** | 4.75 (0.86) | 5.17 (1.30) | 0.13 | 5.51 (1.10) | 4.91 (1.37) | <0.01** | |
| 5. If I were born again, I would not change almost anything in my life. | 5.43 (1.74) | 4.34 (1.84) | <0.01** | 5.00 (1.04) | 4.97 (1.87) | 0.63 | 5.25 (1.85) | 4.77 (1.84) | <0.01** | |
| SWLS | 5.59 (1.08) | 4.85 (1.34) | <0.01** | 5.25 (0.45) | 5.28 (1.26) | 0.39 | 5.59 (0.96) | 5.05 (1.38) | <0.01** | |

M= Mean Value; SD = Standard Deviation. * p is significant <0.05. *** p is significant <0.01. Each score obtained is based on a Likert Scale (1-7): 1 "Strongly Disagree" and 7 "Strongly Agree".

Table 3Scores Obtained on the STAI Scale.

| CTAI | Gender | | | Environment | | | Educational Cycle | | |
|---------------|-------------|---------------|---------|--------------|--------------|------|--------------------------|---------------|---------|
| STAI | Male M (SD) | Female M (SD) | p | Rural M (SD) | Urban M (SD) | p | First M (SD) | Second M (SD) | p |
| Anxiety-State | 1.69 (0.46) | 1.79 (0.54) | 0.07 | 1.92 (0.44) | 1.73 (0.50) | 0.12 | 1.65 (0.46) | 1.79 (0.52) | <0.01** |
| Anxiety-Trait | 1.94 (0.44) | 2.23 (0.59) | <0.01** | 2.27 (0.37) | 2.05 (0.53) | 0.08 | 1.97 (0.50) | 2.12 (0.54) | <0.01** |

M= Mean Value; SD = Standard Deviation. * p is significant <0.05. *** p is significant <0.01. Each score obtained is based on a Likert Scale (0-3): 0 "Not at All" and 3 "Very Much".

 Table 4

 Descriptive Analysis and Differences on the Effect of the Dimensions in the SMS/EMD

| SMS/EMD Gender | | | | Environment | | Educational Cycle | | | |
|------------------------------|-------------|---------------|---------|--------------|--------------|--------------------------|--------------|---------------|---------|
| SMS/EMD | Male M (SD) | Female M (SD) | p | Rural M (SD) | Urban M (SD) | р | First M (SD) | Second M (SD) | р |
| IM to Know | 5.76 (1.26) | 4.95 (1.46) | <0.01** | 5.56 (0.74) | 5.42 (1.42) | 0.80 | 5.32 (1.33) | 5.49 (1.39) | 0.04* |
| IM to Experience Stimulation | 5.67 (1.16) | 4.91 (1.44) | <0.01** | 4.56 (0.56) | 5.37 (1.35) | 0.02* | 5.15 (1.24) | 5.49 (1.39) | <0.01** |
| IM to Accomplish | 5.63 (1.34) | 5.32 (1.40) | <0.01** | 5.37 (0.43) | 5.50 (1.39) | 0.16 | 5.22 (1.47) | 5.70 (1.26) | <0.01* |
| EM-Identified | 5.15 (1.49) | 4.52 (1.09) | <0.01** | 4.87 (0.39) | 4.88 (1.39) | 0.93 | 4.84 (1.23) | 4.91 (1.47) | 0.74 |
| EM- Introjected | 4.50 (1.59) | 4.22 (1.11) | <0.01** | 4.50 (0.78) | 4.38 (1.43) | 0.90 | 4.28 (1.64) | 4.45 (1.22) | 0.99 |
| EM-External Regulation | 3.96 (1.49) | 3.46 (1.04) | <0.01** | 3.81 (1.54) | 3.75 (1.33) | 0.39 | 3.61 (1.41) | 3.84 (1.28) | 0.14 |
| Amotivation | 2.49 (1.47) | 2.78 (1.00) | <0.01** | 3.37 (1.43) | 2.60 (1.29) | 0.04^{*} | 2.57 (1.26) | 2.65 (1.32) | 0.47 |

M= Mean Value; SD = Standard Deviation. * p is significant <0.05. *** p is significant <0.01. Each score obtained is based on a Likert Scale (1-7).

 Table 5

 Correlation Between Life Satisfaction, Motivation and Anxiety

| | | SV | VLS | | | |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Ger | ıder | Demograpl | nic Location | Су | cle |
| Dimension | Male | Female | Rural | Urban | First Cycle | Second Cycle |
| | ρ (p) |
| IM to Know | 0.26 (<0.01**) | 0.62 (<0.01**) | 0.81 (0.01**) | 0.45 (<0.01**) | 0.49 (<0.01**) | 0.47 (<0.01**) |
| IM to Experience Stimulation | 0.23 (<0.01**) | 0.29 (<0.01**) | -0.33 (0.290) | 0.29 (<0.01**) | 0.32 (<0.01**) | 0.33 (<0.01**) |
| IM to Accomplish | 0.15 (<0.01**) | 0.38 (<0.01**) | 0.81 (<0.01**) | 0.25 (<0.01**) | 0.32 (<0.01**) | 0.27 (<0.01**) |
| EM-Identified | 0.13 (0.02*) | 0.20 (<0.01**) | 0.81 (<0.01**) | 0.18 (<0.01**) | 0.08 (0.20) | 0.23 (<0.01**) |
| EM-Introjected | 0.02 (0.76) | 0.18 (<0.01**) | -0.81 (<0.01**) | 0.10 (0.02*) | -0.01 (0.97) | 0.12 (0.03*) |
| EM-External Regulation | 0.07 (0.20) | -0.06 (0.37) | -0.81 (<0.01**) | 0.11 (0.01*) | 0.04 (0.51) | 0.18 (<0.01**) |
| Amotivation | -0.23 (<0.01**) | -0.22 (<0.01**) | -0.81 (<0.01**) | -0.24 (<0.01**) | -0.31 (<0.01**) | -0.21 (<0.01**) |
| Anxiety-State | -0.34 (<0.01**) | -0.80 (<0.01**) | -0.81 (<0.01**) | -0.54 (<0.01**) | -0.59 (<0.01**) | -0.52 (<0.01**) |
| Anxiety-Trait | -0.38 (<0.01**) | -0.83 (<0.01**) | -0.81 (<0.01**) | -0.57 (0.01**) | -0.53 (<0.01**) | -0.59 (<0.01**) |

As illustrated in the table 5, there is a high correlation between the variables of female gender, rural environment, and the second academic cycle with the "IM to know" dimension. For the "IM to experience stimulation" dimension, moderate correlations were found for female values, urban settings, and the second academic cycle. Notable relationships in the "IM to accomplish" dimension include moderate correlations with the female gender and the first cycle, as well as a high correlation with the rural environment variable. Regarding extrinsic motivation, moderate correlations are observed for female gender and the second academic cycle, with a high correlation for the rural location in the "EM-identified" variable. In contrast, "EM-introjected" shows low correlations across both genders, urban areas, and the second cycle. Lastly, "EM-external regulation" displays low correlations for both gender, urban area, and across both academic cycles. Furthermore, it is important to highlight the inverse correlation observed between anxiety and amotivation with life satisfaction, indicating that as levels of anxiety and amotivation increase, life satisfaction decreases. Table 6 presents the Cronbach's Alpha values for each dimension of the SWLS, STAI, and SMS/EMD instruments. Based on the reliability interpretation guidelines provided by Nunnally et al. (1994), the Cronbach's Alpha values for the SWLS, STAI, and SMS/EMD indicate satisfactory reliability, ranging from 0.71 to 0.90.

 Table 6

 Correlation Between Life Satisfaction, Motivation and Anxiety

| Instrument | Cronbach's Alpha |
|---------------------------------|------------------|
| SWLS | |
| SWLS | 0.87 |
| STAI | |
| 1. Anxiety-State | 0.90 |
| 2. Anxiety-Trait | 0.88 |
| SMS/EMD | |
| 1. IM to Know | 0.87 |
| 2. IM to Experience Stimulation | 0.80 |
| 3. IM to Accomplish | 0.87 |
| 4. EM-Identified | 0.72 |
| 5. EM-Introjected | 0.77 |
| 6. EM-External Regulation | 0.76 |
| 7. Amotivation | 0.78 |

Discussion

The aim of this study was to examine the overall life satisfaction of young soccer players and to understand the influence of motivation and anxiety on their well-being. A significant finding is the notable presence of females in the results, with a high correlation observed between various areas of IM. Additionally, an inverse correlation was identified between anxiety and amotivation with life satisfaction, indicating that as anxiety and amotivation levels increase, life satisfaction tends to decrease.

Mansfield et al. (2018) discuss how unpublished literature indicates that participation in performance-based physical activities and community sports can foster positive emotions, well-being, increased confidence, a sense of purpose, and autonomy. Previous research, such as Conroy and Coatsworth (2007), highlights the significant role of the coach in influencing satisfaction and commitment, noting that language related to autonomy, decision-making, and effort can impact these factors. Consistent with the findings of the present study (Table 2), which underscores the importance of satisfaction in athletes, Chen et al. (2018) found that athletes with higher team satisfaction also experience greater overall life satisfaction. Conversely, while the current study (Table 2) reveals that males report higher levels of satisfaction compared to females, Karagozoglu (2013) found that females generally achieve higher satisfaction levels.

Motivation, particularly IM, is a key focus of this research. IM reflects the athletes' dedication to the sport for its inherent enjoyment, making the activity an end in itself (Gómez-López et al., 2021) (Gómez-López et al., 2021) found that most players analysed were intrinsically motivated by stimulation, a result consistent with the current study (Table 4), which shows higher values of IM among males. This difference may be attributed to male soccer players being more driven by the need for selffulfilment compared to their female counterparts (Andanje et al., 2020). As the activity itself is both the goal and the reward, it elicits feelings of accomplishment and self-fulfilment (Standage & Vallerand, 2014). In contrast, Gill et al. (1996) suggest that women are often more motivated by the desire to socialize than by the pursuit of personal achievement. Additionally, other studies have shown that Intrinsic Motivation (IM) often surpasses extrinsic motivation and amotivation (Sheehan et al., 2018), which is consistent with the findings of this study (Table 4), although results related to demographic location and amotivation differ. In contrast, Mishra and Acharya (2017) reported a positive linear relationship between sports participation and amotivation, a trend observed

only among females in this study. Notably, Vernegaard et al. (2017) found that participants experienced higher levels of extrinsic motivation in soccer compared to physical education in general, a finding that contrasts with the higher levels of IM observed in young players in this study (Table 4). Similarly, EscamillaFajardo et al. (2020) reported that adolescents exhibited higher levels of extrinsic motivation, likely influenced by competitive aspects, as athletes focus on defeating opponents or achieving personal improvements.

This research also examines the impact of anxiety on young soccer players (Table 3). Anxiety is a prevalent emotional state among athletes at all performance levels (Gómez-López et al., 2021). The analysis of trait anxiety reveals that females exhibit higher levels compared to males, a trend that aligns with findings from Castro-Sánchez et al. (2019), who reported that females had the highest percentage in the high-level trait anxiety category. Conversely, several studies have observed low levels of state anxiety in the sample (Abenza et al., 2009; Aguirre-Loaiza & Ramos Bermúdez, 2011; Castro Sánchez & Zurita Ortega, 2019; Monteagudo María C Martínez et al., 2013). Castro Sánchez et al. (2019) suggest that these low levels may be attributed to the fact that many young individuals engage in soccer primarily for recreational purposes and enjoyment, rather than experiencing high levels of anxiety. Despite the higher levels of trait anxiety found among females (Table 3), Madsen et al. (2022) found that players with more match experience tend to show lower levels of anxiety. In this context, age has been shown to be a predictor of cognitive anxiety, with older soccer players generally experiencing lower levels of cognitive anxiety (Mesón et al., 2016; Müller et al., 2016). Conversely, internalizing personal norms, seeking social recognition and self-approval, internal pressures, and guilt are often associated with ruminative processes that contribute to higher levels of cognitive anxiety (Merino et al., 2016). Low levels of Intrinsic Motivation (IM) have been linked to higher somatic anxiety (Mesón et al., 2016), and response time in young soccer players has been inversely correlated with anxiety levels (Wilczyńska et al., 2021). Young soccer players can benefit from psychological training to better manage competitive pressures (Olmedilla et al., 2019), and virtual reality-based relaxation techniques have been found to reduce both somatic and cognitive anxiety (Harrison et al., 2021).

Conclusions

The primary objective of this study was to assess the overall life satisfaction of young soccer players and explore its

impact on their emotional well-being and sporting performance, considering motivational factors. Key findings include an inverse correlation between motivation and anxiety with life satisfaction, suggesting that increased motivation and anxiety are associated with decreased life satisfaction among the subjects studied. Additionally, female soccer players exhibited higher levels of trait anxiety compared to their male counterparts. These insights into the influence of anxiety and motivation on young athletes' lives are valuable for coaches and the athletes' support systems. Understanding these factors can help in addressing and managing them effectively, thereby enhancing life satisfaction, improving mental health, and fostering greater adherence to the sport.

It is important to acknowledge the limitations of this study. The SWLS scale, used to assess satisfaction among young soccer players, focuses on overall life satisfaction and does not provide more specific data that could offer detailed insights. Additionally, the data collection was conducted via online surveys, which, while cost-effective and efficient, may present certain drawbacks. Future research could enhance the current literature by exploring the elevated levels of trait anxiety observed in female soccer players in this study. Moreover, investigating the high "amotivation" scores among young soccer players from rural areas could provide valuable insights. Research indicates that creating empowering environments, ensuring alignment between coaches and teams, and fostering task-oriented settings can enhance satisfaction and motivation while reducing anxiety in soccer players. Such climates promote positive self-perception and lower rough play attitudes. Additionally, supportive motivational environments increase players' intention to continue in the sport, while disempowering ones can lead to dropout, with selfdetermined motivation playing a key Accomplishment motivation significantly impacts performance, whereas anxiety tends to hinder it. Furthermore, coach-player alignment and autonomous

support positively affect youth players' motivation and commitment, highlighting the importance of encouraging autonomy and avoiding authoritarian approaches.

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Institutional Review Board Statement: The use of this data did not require the approval of an accredited ethics committee as it is not covered by data protection principles, i.e. it is non-identifiable and anonymised data collected through an anonymous survey for elite athletes. Furthermore, under Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (which entered into force on 25 May 2016 and is binding as of 25 May 2018), data protection principles need not be applied to anonymous information (i.e. information relating to an identifiable natural person, nor to data of a subject who is not, or is no longer, identifiable). Therefore, the Regulation does not affect the processing of our information. Even for statistical or research purposes, its use does not require the approval of an accredited ethics committee.

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