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Neuroscientific Perspectives on Emotional Intelligence and Self-Regulation in Individual Sports

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Abstract: *Sports achievements in contemporary conditions rely not only on physical training but also on integrating innovative psychological training methods. This article aims to analyse the connection between emotional intelligence levels and self-regulation skills in athletes engaged in individual sports. A correlational research design was employed, making it ideal for examining the relationship between emotional intelligence and self-regulation in individual sports. This approach allowed for the analysis of real sports scenarios, using statistical tools to summarise empirical findings, and applying comparison methods to highlight differences. Findings reveal that athletes in individual sports generally exhibit average emotional intelligence, reflecting moderate adaptability to extreme professional situations. The highest levels of emotional intelligence are observed in gymnasts and martial arts practitioners. Athletes in tennis and swimming demonstrate average levels. Those engaged in karate and swimming display superior emotional awareness and empathy. The data also confirm that emotional intelligence is a critical predictor for self-regulation under stress. Key components of emotional intelligence include emotional awareness, stress management, and adaptability. Practical applications for enhancing emotional intelligence involve developing specialized programs, providing individual psychological support, and integrating psycho-emotional training with general athletic programs.*
In conclusion, the study underscores the importance of fostering psychologically resilient environments to enable athletes to achieve their goals effectively.

Keywords: *sport; self-regulation; psychology; motivation; emotional intelligence.*

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1. Introduction

In today's sporting environment, physical activity is not seen as the primary means of success in achieving goals. While in sports, players should strive to achieve long-term goals through hard training, athletes must also constantly manage the stress of rigorous training and competition, which involves being aware of and controlling their own emotions as well as those of others (including opponents, coaches, officials and fans) (Antonopoulou, 2024). The issue of emotion self-regulation is especially relevant in the field of individual sports, where athletes are fully responsible for the results of their actions and the ability to control and effectively use their emotions. Emotional intelligence, which means the ability to recognize and control one's own emotions and understand the emotional states of others, plays an important role in maintaining psychological balance in the environment. In addition, as defined in some modern studies, it also contributes to overcoming stress and achieving high results. Results from experts in the psychology of sport and exercise have shown that athletes who perform better on emotional intelligence exams have better success rates (Dumčienė, 2021). Physiological reactions to stress, the use of psychological skills and increased physical performance are all related to emotional intelligence. At the same time, the problem of self-regulation, as one of the key components of emotional intelligence, is not fully covered in modern scientific discourse. This affects the fact that the problem of studying self-regulation in individual sports is important and relevant since the ability to control impulses, manage emotional reactions and adapt their behavior to the requirements of the situation are important factors in the success of modern athletes. The relevance of the study of the relationship between emotional intelligence and self-regulation is due to the need to investigate the main psychological aspects that contribute to the effective adaptation of athletes to certain stressful situations and the achievement of a level of performance in the field of sports. This issue is especially important in individual sports, where emotions and the psychological state of the athlete play a significant role in the performance of their activities. Therefore, the main research problem is to determine the role of emotional intelligence and its relationship with self-regulation in modern individual sports.

The focus of the study is to determine the role of emotional intelligence and self-regulation in athletes engaged in individual sports. Also, the focus of the study is to identify certain specific aspects of emotional regulation that have a significant impact on the self-regulation of athletes. As a result, the authors will offer their own recommendations for improving the self-regulation skills of modern athletes.

Thus, the main purpose of this paper is to analyse the relationship between the level of emotional intelligence and self-regulation skills in modern athletes engaged in individual sports. Accordingly, the main research questions are as follows:

1. What is the level of emotional intelligence of athletes involved in individual sports?
2. What is the connection between the development of emotional intelligence and self-regulation in athletes?
3. What are the recommended solutions to improve the development of emotional intelligence in athletes?

The main research hypothesis is that there is a positive relationship between the level of emotional intelligence (studying the EQ-i and TEIQue scales) and the level of self-regulation of athletes in individual sports. That is, this assumption determines that athletes with high ET scores are able to better control stress and adapt to changing competitive conditions.

2. Literature review

Modern scientists have drawn attention to the important role of emotional intelligence in sports and have characterized various features of its development and key factors of its formation. Recent studies have shown the value of developing emotional intelligence for athletes, which allows them to effectively control their emotional state and understand the emotions of other opponents (Antonopoulou, 2024; Dumčienė, 2021; Bakker & Vries, 2020). At the same time, in the current

scientific discourse, studies focusing on the relationship between performance, stress, anxiety, and self-confidence are noteworthy (Cañabate et al., 2020; Cheng et al., 2021). The correlation between performance and self-confidence is among the least controversial correlations (Cheng et al., 2021; Barney, Prusak, & Davis, 2021). The authors' research has shown considerable empirical and theoretical support for this beneficial relationship (Barney, Prusak, & Davis, 2021; Gunawardena, 2018). In addition, research by other scholars shows a well-established link between emotional intelligence, self-efficacy, and self-confidence during sports competitions (Bakker & Vries, 2020; Halian et al., 2022). The current scientific literature has determined that emotional intelligence primarily predicts sports performance (Fuentealba-Urra et al., 2023).

Emotional intelligence is defined in different ways in the literature. According to recent research, emotional intelligence is the ability to recognize, control and use one's own emotions and the emotions of others to shape one's thoughts and actions (Dugué, Sirost, & Dosseville, 2021; Shariatpanahi et al., 2022). Some scientists also define a model of abilities according to which emotional intelligence is a set of properties where emotions interact adaptively with intelligence. These include the identification of emotions, the willful use of emotions, and their understanding (Iqbal et al., 2021). Thus, the scientific literature clearly defines emotional intelligence as a key factor in the system of predicting individual performance and an important component for leadership and success in modern sports (Dumčienė, 2021; Barney, Prusak, & Davis, 2021; Marheni et al., 2023). Considering this aspect (the importance of emotional intelligence) opens up new opportunities to reach new heights of sporting performance, thus Improving sports achievements and the process of gradual psychological recovery. In the future, this will allow us to develop new ways of organizing the training process and strategically plan athletes' training.

According to modern theoretical studies, the authors distinguish two aspects of the emotional intelligence system: intrapersonal and interpersonal (Iqbal et al., 2021; Kopp, Reichert, & Jekauc, 2021). The first is determined by factors such as self-esteem, understanding of one's feelings, self-confidence, self-control, patience, responsibility, optimism, belief in one's capabilities and skills, and motivation for achievement. At the same time, the interpersonal aspect is responsible for empathy, sociability, ability to communicate with opponents, tolerance, and openness (Dumčienė, 2021; Iqbal et al., 2021). In general, the importance of emotional intelligence in crisis conditions has been proven, and it is also important for the rapid adaptation of individuals to unexpected situations. During sports competitions, such capabilities are essential, as they unlock the potential of athletes, allow them to act in a focused manner even in unexpected situations, and be able to turn unfavorable circumstances into positive moments and use them to their advantage. The researchers' attention to this issue is understandable, as the commercialization of sports competitions has created the prerequisites for additional motivation of athletes and coaches. While previously, the permitted pharmacological component opened opportunities to achieve the appropriate results, with increased competition in the pharmaceutical services market and the need to obtain drugs of the required quality (which have the desired effect), a challenge has emerged to use one's potential correctly. Against this background, new requirements for the psychological training of athletes are as important as the physical component of their training. Researchers have focused on this but further consideration will also be required to address the issues related to the realisation of such potential in individual sports (Shariatpanahi et al., 2022; Marheni et al., 2023). Not much attention has been paid to this aspect, although it is undoubtedly highly relevant for further research, including empirical measurements using different systems of calculating the information received. Other studies have traced a direct link between a high level of emotional intelligence and sports performance (Kopp, Reichert, & Jekauc, 2021; Krap et al., 2024). A number of other studies have also shown the importance of developing emotional intelligence in athletes, as it allows them not only to control their own emotions but also to understand the emotional states of their opponents (Rodriguez-Romo et al., 2021; Dumčienė & Sipaviciene, 2021). At the same time, other researchers have shown the importance of introducing mental and emotional intelligence education into sports programs, as they increase the personal resilience of future professional

athletes (Marheni et al., 2023; Chellig, Azzi, & Bakdi, 2024). This will allow not only to consider the prospects of physical training, but also to take care of the possibilities of building individual trajectories of education of promising athletes, based on the consideration of their psychological indicators and emotional stability during the educational process and competitions (preparatory and professional). Thus, modern scientific studies present a holistic understanding and interpretation of emotional intelligence. In addition, modern scientists have drawn attention to the importance of its development in athletes. However, certain issues are still poorly understood. In particular, as can be seen from the literature review, modern scholars have paid little attention to self-regulation. In addition, more analysis will be needed to clarify the relationship between emotional intelligence and self-regulation in athletes engaged in individual sports. The present study will fill these gaps and characterise the full role of emotional intelligence and self-regulation in individual sport athletes.

3. Methodology

3.1. Research design

The type of this study is a correlational study, the purpose of which is to identify the relationship between the level of emotional intelligence of athletes and their ability to self-regulate. For the design of this study, the correlational type is the optimal choice to determine the relationship between emotional intelligence and self-regulation in individual sports. In addition, this type was chosen because the correlational study does not require a physical experimental intervention. This will allow for analysis in real sports conditions. In the case of correlational research, athletes can fill out structured questionnaires and take tests without changing their usual environment.

3.2. Sample and participants

This study is based on purposive sampling, which involves the targeted inclusion of participants. The criteria for inclusion of potential participants included reference to the type of sport, training experience, age range and the provision of informed consent to participate in the study and to have their data processed:

1. Sports: individual sports: athletics, tennis, swimming, gymnastics, swimming, martial arts.
2. Training experience: at least 2 years of professional experience in the chosen sport. This will ensure that the participants have the appropriate level of training to have a tangible impact on psychological factors.
3. Age: participants are between 18 and 35 years old. This time is determined by optimal physical and psychological activity.
4. Gender: the sample includes both men and women.
5. Informed consent to participate. All potential participants must provide written consent to participate in the study and have their data processed.

Table 1. Data of the study participants (Source: Own elaboration)

Data	**Quantity**	%
Sport		
Athletics	7 people	20%
Tennis	8 people	23%
Swimming	7 people	20%
Artistic gymnastics	8 people	23%
Martial arts	5 people	14%
Training experience		
3-5 years	10 people	28%
6-10 years	15 people	44%
More than 10 years	10 people	28%
By age		
18-24 years old	12 people	34%
25-30 years old	15 people	43%
31-35 years old	8 people	23%

Potential participants were recruited through the networks of sports clubs and coaches, social media announcements and personal contacts. In all messages, participants received detailed information about the purpose and direction of the study, guarantees of anonymity, and the main aspects of the participation procedure. In total, 35 participants were selected. Table 1 provides detailed information about all respondents.

3.3. Tools and procedure

Data collection took place in September-October 2024. Initially, all participants were informed of the study objectives and provided informed consent. The main tools in the study are testing and questionnaires. For this purpose, the Test of Emotional Intelligence (TEIQue) was used. This test has a high level of confidence in the definition of EI and is used worldwide. The TEIQue-SF consists of 15 subscales organised into four components: well-being, self-control, emotionality, and sociability. In total, the questionnaire consists of 30 items (2 items from each of the 15 subscales). Participants answered on a 7-point Likert scale, where a score of 1 meant "strongly disagree" and 7 meant "strongly agree". High scores indicate that respondents freely communicate their emotions to others and can express their feelings accurately. Low scores indicate some problems in communicating thoughts and emotions. In the present study, the Cronbach's alpha coefficient for the total TEIQue-SF score was .84 (the ability to express emotions subscale was .89).

The EQ-I test was also used, which assesses certain important aspects, including interpersonal skills, self-awareness, adaptability, self-concept, and general emotional well-being.

Another important tool was the use of special scales to assess the level of self-regulation - SRQ. This scale defines a clear level of skills for goal-oriented behaviour: planning, self-control and adaptability.

3.4. Data analysis

The test results are transferred to special Excel spreadsheets, where the average values for each component are found. This software was chosen because of its ease of use and user-friendly interface for finding averages. In order to optimise the work, the following table was created: research participant - sport - scale score - test result. This made it possible to find common indicators for all tests. In some cases, the data was also analysed using statistical analysis. This mainly concerned the TEIQue - SF test, where descriptive statistics, mean and standard deviation were calculated. After that, a comprehensive comparative analysis of the data obtained with the information presented in other scientific papers was carried out.

4. Results

The study of the level of development of various components of emotional intelligence of athletes in individual sports revealed that there are certain differences in certain parameters in representatives of different sports (martial arts, athletics, swimming, etc.) (Mon-López et al., 2023; Çetin, Adiloğulları, & Şenel, 2021). In cyclic sports, such elements of emotional intelligence as managing one's own emotional state and self-motivation play a role, while in martial arts, the skills of managing one's own emotions and the ability to assess the emotional state of another person play a significant role. The distribution of the main indicators of emotional intelligence (EI) among the study participants was formed based on an average score of 105, corresponding to the average level of emotional intelligence (according to the EQ-i scale). This indicated that the majority of respondents had a sufficient level of emotional skills to conduct professional sports activities. A low level of EI (less than 90 points) was scored by about 20% of the participants. This category represents individual sports athletes who showed insufficient ability to express emotions. Accordingly, such people have difficulty managing emotions and have problems interacting with other athletes or opponents. Low scores were associated with such aspects as empathy (insufficient ability to understand and understand the emotions of others) and stress tolerance. The latter category corresponded to a low level of coping with emotional stress. The average level of EI (90-110 points) was characteristic of 50% of the respondents. This was the largest group with a

sufficient level of EI development. Participants in this group could cope with their emotions, demonstrated self-control skills, and adapt to complex professional and changing conditions. These people are also able to maintain effective interpersonal communication. However, the average level showed that in some cases, these people also expressed insufficient adaptability to respond to extreme professional situations. A high level of EI (over 110 points) was observed in 30% of participants. Accordingly, those with a high level of EI were characterised by stable emotional awareness (the ability to manage their emotional state), the ability to effectively use emotions to achieve their goals, adaptability and a high level of interpersonal skills. The participants of this group showed high-stress resistance and demonstrated better results in sports tasks requiring a high concentration level. Table 2 provides detailed data on the level of EI on the EQ scale.

Table 2. Distribution of EI levels by EQ. (Source: Own elaboration.)

Level	Points	%
Low level	>90 points	20%
Intermediate level	90 - 110 points	50%
High level	<110 points	30%

Taking into account specific sports, the highest percentage of high EI levels was found among athletes engaged in gymnastics (33.3%) and martial arts (33.3%). We believe that this is due to the fact that in these sports, requirements for emotional flexibility and adaptability play a significant role. The highest percentage of low EI levels was recorded among the respondents involved in athletics (28.6%). Representatives of tennis and swimming expressed mostly an average level of EI. Their indicators also indicate the stability of emotional self-regulation in general, but there is potential for improvement. Table 3 shows a detailed breakdown of levels by sport.

Table 3. Participants' performance by sport (Source: Own elaboration.)

Sport, level	Indicators	Quantity	%
Athletics (7 people)			
Low level	>90 points	2	28,6%
Intermediate level	90-110 points	4	57%
High level	<110 points	1	14,3%
Tennis (5 persons)			
Low level	>90 points	1	20%
Intermediate level	90-110 points	3	60%
High level	<110 points	1	20%
Swimming (8 people)			
Low level	>90 points	1	12,5%
Intermediate level	90-110 points	5	62,5%
High level	<110 points	2	25%
Artistic gymnastics (6 people)			
	>90 points	1	16,7%
	90-110 points	3	50%
	<110 points	2	33,3%
Martial arts (9 people)			
	>90 points	2	22,2%
	90-110 points	4	44,4%
	<110 points	3	33,3%

According to the TEIQue scale, several important aspects of emotional intelligence were identified among the study participants. Emotional awareness and empathy were the highest indicators of emotional intelligence. Emotional awareness, which was defined as the ability to recognise and understand one's own emotions and those of others, was developed in 82% of participants. A high level of emotional awareness enables modern athletes to respond to emotional cues promptly. For this reason, this skill is an important factor in developing self-regulation in sports.

The development of empathy skills was recorded at a high level in 75% of participants. This ability is essential for athletes, as it allows them to understand the emotional state of coaches or opponents to ensure effective interaction. Stress management (40 per cent) and adaptability (35 per cent) were also low. The low level of development of stress management skills means that many participants cannot always control their emotions in critical situations. Accordingly, this can lead to breakdowns during important competitions or training sessions.

Emotional intelligence and self-regulation are important elements in achieving high sports performance (in particular, also within individual sports) (Wang et al., 2020). Under conditions of significant physical and emotional stress, an athlete's ability to recognise, understand, and manage their emotions directly affects their ability to self-control, adapt, and plan effectively (Sukys et al., 2019).

The study (among athletes using the Self-Regulation Questionnaire scale) made it possible to summarise the level of self-regulation. On a scale of 1 to 5, the average SRQ score was 4.2. This is summarised by the following distribution of the level of self-regulation among the test participants, shown in Table 4.

Table 4. *Participants' SRQ scores (**Source:** Own elaboration)*

Level	Quantity	%
High	15	40%
Medium	17	45%
Low	3	15%

These results indicate rather high general indicators of the ability to independently organise the process of self-regulation. However, there is also a need to apply an individualised approach to work with certain groups of athletes (Rico-González, 2023; Sapkota, 2024). At the same time, the analysis of statistical information made it possible to find the existence of a tangible connection between the levels of emotional intelligence and indicators of self-regulation. It was found that the general indicators of emotional intelligence, measured using the questionnaire, are positively correlated with self-regulation indicators (SRQ): $r = 0.68$, $p < 0.01$. In particular, the closest relationship was formed between some components of emotional intelligence and self-regulation: emotional awareness and the ability to plan effectively ($r = 0.73$, $p < 0.01$), stress management and self-control ($r = 0.66$, $p < 0.01$). Thus, athletes with higher indicators of adaptability and emotional stability (consciousness) have the ability to respond more flexibly to non-standard situations and direct challenges during competitions. A high level of self-regulation allowed them to make and implement the necessary decisions more effectively while avoiding emotional burnout.

The study has shown that emotional intelligence has become an important predictor of athletes' ability to regulate their stress levels on their own. The high levels of emotional intelligence found in athletes allow them to control their behaviour much more effectively and make the necessary decisions in adverse conditions of high psychological pressure.

The most influential components of emotional intelligence are emotional awareness (identification of one's own emotional states), stress management (maintaining inner peace in difficult circumstances), and high adaptability (prompt response to external challenges) (Aravind, Gupta, & Ra, 2022). The results obtained indicate a significant need for the development of emotional intelligence as a basis for improving the level of self-regulation of athletes in individual sports.

The general direction of the recommendations for practical application will be the need to form psychologically stable environments in which each athlete will be able to effectively achieve the results set while avoiding the negative manifestations of burnout, excessive psychological exhaustion and emotional costs. A schematic representation of the recommendations allows us to imagine the general direction of training (see *Figure 1*).

Describing each of the proposed points in more detail, it is worth noting that there are separate sub-points. In particular, the formation of special programmes for developing emotional intelligence also involves the gradual evolution of emotional awareness, the ability to work on one's emotions and analyse the causes and consequences of one's behaviour. It is also about the ability to manage one's stress and to master appropriate relaxation techniques (including breathing exercises, meditation, etc.) that allow one to counteract stressful situations, for example, during a long physical recovery. The development of adaptability opens up opportunities for training the ability to respond quickly to transformations, overcome difficulties and formulate new answers to complex issues.

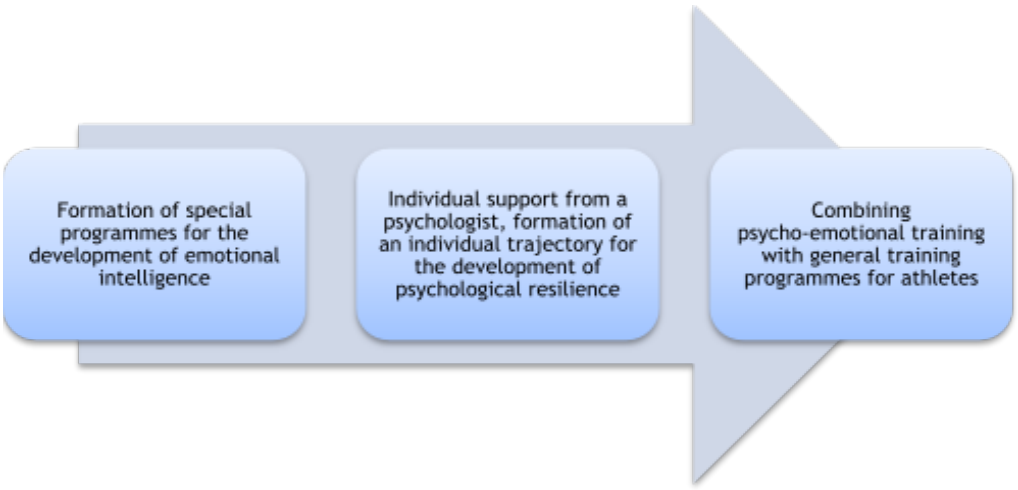

Figure 1. *Practical recommendations* ***(Source:*** *Own elaboration.)*

Individual support from a psychologist and the formation of an individual trajectory for the development of psychological resilience requires a personalised approach to working on one's psycho-emotional problems. Cognitive-behavioural techniques (overcoming intrusive negative thoughts, identifying negative classifications, and focusing on constructive ones) are the main aspects of this area. This approach improves self-regulation and reduces anxiety. In general, it is also important to consider the development of self-regulation. In particular, we are discussing organising exercises for impulse control, concentration, anger and irritation management. Another extremely relevant aspect is the promotion of motivational practices. The basis of this process is to help overcome the consequences of emotional burnout, support further positive attitudes, and focus on achieving goals.

The combination of psycho-emotional training with general athlete training programmes is aimed at the harmonious development of athletes and the integration of physical, intellectual and psychological education. This aspect will require the organisation of group classes (including collective exercises to develop emotional training and improve team spirit), work with the visual component (forming an idea of successful actions that will allow you to prepare for real challenges), prevention of psychological exhaustion (energy management, effective load distribution), and permanent monitoring of the internal state (medical examinations, determining the general emotional background).

5. Discussion

The main research problem was to determine the relationship between emotional intelligence and self-regulation in athletes engaged in individual sports. The study also focuses on identifying the main aspects of emotional regulation that have a significant impact on the self-regulatory processes of athletes. As a result, the study offers its own recommendation solutions to improve the formation and development of self-regulation skills in modern athletes.

The results of the study demonstrated that most athletes engaged in individual sports have an average level of EI. The average level (from 90-110 points) indicated that in some cases, these surveyed athletes may express insufficient adaptability to respond to extreme professional situations. At the same time, only 30% had a high level of EI. Accordingly, these individuals possessed stable emotional awareness and empathy skills. These results correlate with other studies that have also pointed to the mediocrity of EI indicators in individuals engaged in individual sports (Yurko & Riabtsev, 2024; Krajniak et al., 2017; Kozlovskyi et al., 2024). The findings are also consistent with studies that have indicated that EI and its components play an important role in individual sports, with athletes' abilities such as predicting opponents' behaviour, understanding short verbal cues from coaches, and empathy proving to be important (Fernandez-Perez & Martin-Rojas, 2022).

The study also found that the highest percentage of high levels of EI was observed among athletes involved in gymnastics and martial arts (33.3% each). Representatives of tennis and swimming expressed mainly an average level of EI. Their indicators also indicate the stability of emotional self-regulation in general, which is also correlated with other studies. In particular, according to the results of other researchers, athletes in individual sports (karate, swimming) have higher levels of emotional awareness and empathy, while in team sports (basketball, football), the skills of recognising other people's emotions are noticeable. Modern scientists, who have also examined athletes in individual sports (athletics, cycling, gymnastics, swimming, badminton, tennis) and team sports (basketball, volleyball, football, etc.), have concluded that athletes in team sports have more developed self-awareness and a high level of self-regulation skills (Tatsi et al., 2022; Mercader-Rubio et al., 2023; Tamminen et al., 2021). These statements also coincide with the present study, as the TEIQue scale found that individual athletes have low scores on stress management and adaptability (40% and 35%, respectively). Thus, the low level of development of stress management skills determines that a significant part of participants are not always able to control their emotions in critical situations. According to other studies, there is no significant difference in other components of emotional skills (ability to express emotions, empathy) between male and female representatives of individual and team sports. The study of the interpersonal component of EI, which includes understanding other people's emotions, also demonstrates the importance of skills to manage not only one's own emotions but also understanding other people's emotional states. The results of the study show that there is a direct link between emotional intelligence and self-regulation. This relationship is manifested in the fact that EI is the foundation for the development of self-regulation in sports. Components such as emotional awareness, emotion management, empathy, adaptability, and psychological flexibility form important conditions for effective self-regulation. The latter, in turn, affects the improvement of sports performance and stress reduction. Thus, the study confirmed the main hypothesis that there is a relationship between the level of emotional intelligence and the level of self-regulation of athletes in individual sports. These results are also consistent with other studies that have shown that athletes with high EI scores are able to better control stress and adapt to changing competitive conditions (Trotter, Obine, & Sharpe, 2023). The present study also revealed that emotional intelligence is a significant predictor of athletes' ability to regulate their stress levels. In particular, the identified high levels of emotional intelligence allow athletes to control their behaviour and make decisions in adverse conditions much more effectively. These views are also confirmed by other works that point to the importance of emotional intelligence for the successful performance of athletes or coaches (Tamminen et al., 2021). According to a number of studies, confidence expressed in emotional terms is also usually associated with success in sports: positive emotions can lead to greater confidence, which can lead to a more successful performance.

The proposed results emphasise that the main direction of practical application will be the need to form psychologically stable environments in which each athlete will be able to effectively achieve the set results while avoiding negative psychological effects. It is proved that important aspects include the formation of special programmes for the development of emotional intelligence,

individual support from a psychologist, the formation of an individual trajectory for the development of psychological resilience, and the combination of psycho-emotional training with general training programmes for athletes. Each of these elements has smaller sub-items that constitute a practical decoding of the general vectors. The main proposed results confirm the conclusions of other scientists who point to the relevance of creating the necessary conditions for training, including both the necessary physical training and the features of mental training aimed at achieving better results (Safarli, 2024; Orlova et al., 2024). At the same time, some researchers argue that stimulating motivational practices aimed at overcoming the effects of emotional burnout and focusing on achieving sporting goals is an unnecessary element (Kumar, 2024; Semigina et al., 2021). Such an approach is usually explained by a complex psychological phenomenon, according to which an athlete in individual sports is generally motivated, so additional psychological stimulation can bring more negative effects (including obsession with mistakes, nervous instability, etc.). The assumptions of other researchers that it is an integrated part of psychological preparation, development of emotional stability before competitions, etc., look much more objective (Hameli & Ordun, 2022; You et al., 2021; Cattani, 2024). In fact, such results are based on relevant empirical measurements, so conclusions about the unnecessary motivational component seem premature and require further scientific proof. The methodology proposed in this study has certain limitations that should be taken into account when interpreting the data obtained. First of all, we are talking about the imperfection of the survey method. Despite all the objective components, there is a significant element of subjectivity in working with such results. Although there is no need to fundamentally revise the data, some of the answers may have been based on individual experiences, which may differ from athlete to athlete (taking into account their psychological state and stress tolerance). Accordingly, there is a need to take this feature of the surveys into account, as it is partly impossible to achieve full objectivity in the answers in general.

6. Conclusions

Therefore, athletes engaged in individual sports primarily have an average level of EI, which indicates insufficient adaptability to respond to extreme professional situations in some cases. The highest percentage of high EI levels was found in gymnastics and martial arts athletes. Representatives of tennis and swimming expressed mainly an average level of EI. Their indicators also indicate general psychological stability and the ability for emotional self-regulation. At the same time, athletes in individual sports (karate, swimming) have higher levels of emotional awareness and empathy, while in team sports (basketball, football), the skills of recognising other people's emotions are noticeable. The low level of stress management skills determines that a significant number of participants cannot always control their emotions in critical situations.

Emotional intelligence is a relevant predictor for athletes regarding self-regulation of the resulting stress levels. The high levels of emotional awareness found in athletes allow them to cope with anxiety, control their behaviour, and make the necessary decisions even under psychological pressure. The most influential components of emotional intelligence are emotional awareness (identification of one's emotional states), stress management (maintaining inner peace in difficult circumstances), and high adaptability (prompt response to external challenges). For this reason, the development of emotional intelligence is one of the foundations for improving the level of self-regulation of athletes in individual sports.

The study proved that the main direction for practical application would be to form psychologically stable environments where each athlete can effectively achieve the set results while avoiding adverse psychological effects. In this regard, the formation of special programmes for the development of emotional intelligence, individual support from a psychologist, the formation of an individual trajectory for the development of psychological resilience, and the combination of psycho-emotional training with general training programmes for athletes can be considered relevant.

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