Original Article

Self-regulatory behavior styles of juniors in achieving winning outcomes

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Abstract:
The purpose of this study is to identify the dominant styles of self-regulatory behavior among junior athletes in their pursuit of winning outcomes. **Methods:** The research sample comprised juniors aged 15–19 who actively participated in sports and competed at various levels, ranging from regional contests to national championships and international tournaments. Statistical analysis involved empirical data collected from participants who had achieved success in individual sports and had won matches in team sports. The characteristics of the sample population are as follows: n = 154; M = 17.34; SD = ±3.51; Me = 17.00. The key parameters of the styles of self-regulatory behavior, self-acceptance, the need for sports achievements, and self-efficacy in subject activity and interpersonal communication were determined using valid and reliable psychodiagnostic tools. **Results.** Pearson's correlation coefficient (R) allowed for establishing thirteen direct correlations and one inverse correlation of the styles of self-regulation and self-acceptance with the parameters of a winning outcome (p ≤ .050; p ≤ .010). It was found that planning as a style of junior athletes' self-regulatory activity has all significant direct correlations with the parameters of a winning outcome. It was established that independence is the most essential characteristic of self-regulation in sporting activities. The absence of correlations in the parameters "modeling" and "programming" does not reduce their value as self-regulation styles but rather reflects their formation in our population sample. **Discussion and conclusions.** It was substantiated that the research into the styles of junior athletes' self-regulatory behavior in achieving a winning outcome is an examination of the psychological content parameters of managing one's psycho-emotional state, which is achieved through verbal, visual, and behavioral means. It was noted that the parameter "evaluating sports results" has one correlation with the need for achievements and no correlation with the other two parameters – self-efficacy in subject activity and self-efficacy in interpersonal communication. It was explained that junior athletes, permanently evaluating their sports achievements, focus too much on their personality, strengths and weaknesses, which is accompanied by the work of defense mechanisms, which do not allow them to properly concentrate on the process of learning and training. It is recommended that the obtained empirical results and theoretical conclusions be used in the education and training process at sports schools for children and youth and junior academies functioning in professional teams.
Keywords: self-regulation, self-actualization, self-efficacy, mental health, optimal state of competitive activity, self-acceptance.

Introduction

Juniors' engagement in sports is an important phenomenon in modern life. Sporting activities reflect the system of an individual's value orientations. Sports affect the process and results of youth's socialization and generate a system of values shared by young people. Adolescents see the meaning of their self-fulfillment and their sports self-realization in this system. Juniors' engagement in sporting activities makes them create their own lifestyles. This articulation of the general contours of the problem allows us to focus researchers' attention on the phenomena belonging to the sphere of a junior athlete's subjectness. The research into the styles of juniors' self-regulatory behavior is essential in the list of scientific problems of subjectness (Kuzikova, 2017; López et al., 2024). M. Boryshevsky (2012) considers self-regulatory behavior as a specific type of mental activity which makes the subject go beyond the outside goals and tasks. Subjects of sporting activities are capable of setting a new goal, creating new meanings, finding means to achieve aims, and making changes to external and internal conditions while increasing reserve capacities of their psyche through the actualization of dominant motives of activeness (Boryshevsky, 2012: 8).

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Research on expectations, namely on the expected evaluation in the context of sporting activities, is essential for sports psychology and especially for studies related to junior sports. It was statistically proved that respondents' expectations are the mechanism of self-regulatory behavior in the context of a leading activity (Popovych et al., 2019a). The research by I. Popovych et al. (2023c) demonstrates that the profiles of juniors' pre-competition expectations created under the changed conditions of a particular competition are capable of testing the meaning and value orientations, verifying their viability and relevance through external factors of the current activity. Under such conditions, a change in organizational and spatio-temporal dimensions increases the stressfulness of competitions; hence, creating a safe space is a primary aim. The style of juniors' self-regulatory behavior comes to the fore. The ability to handle competitive loads and cope with emotional stress depends on its formation. The above challenges affect not only sports results of a certain performance or a match in team sports but also an athlete's mental health and their ability to resist stressors (Shcherbak et al., 2023), maintain high levels of resilience (Popovych et al., 2022b), and be in optimal shape.

In the research on young women's emotional self-regulation, whose sample consisted of females aged 20 to 40, V. Zarytska and L. Bekinov (2017) found out that the key dimension of this phenomenon is caused by age: biological (the number of years), social (professional and social status), and psychological (the level of adaptability to changed conditions, intelligence, and the ability to improve oneself). Self-regulation is based on the achieved level, high operational readiness, and ability to perform actual professional activity. Sports studies on the operationalization of football players' tactical thinking demonstrated that the significant superiority in the parameters of thinking is capable of creating competition and affecting sports results (Popovych et al., 2021b).

In the study of N. Vasiliev (2007), five stages of an individual's self-regulation were identified: 1) the process of perceiving an event, forming a psychological image, and symbolizing it in mind. It is essential that changing the direction of perceiving an event is the main method of self-regulation at this stage; 2) evaluation of the event; 3) emotional experience; 4) external behavioral response; 5) emotional consequence after leaving the situation. The path from perceiving the event to the emotional consequence outlined important points on which the style of self-regulatory behavior is based. Our research represents an attempt to identify the most sensitive dimensions of the research subject relevantly. The works of Yu. Cheban et al. (2020a; 2020b) demonstrate the emotional-volitional potential of self-mobilization of elite rowing athletes in the dimensions of time perspective. Significantly, researchers consider the formation of a psychological image and its symbolization in mind to be the most effective method of a self-regulatory influence. The self-regulatory potential is based on three dimensions: the experience of "the past", the actualization of "the future", and the realization through regulating "the present" (Cheban et al., 2020a). Obviously, the coherence of the three dimensions ensures the necessary form, content, and outcome of sporting activities.

Another aspect of self-regulatory activity is reflected in the comparative analysis of the self-regulatory competencies of boys with developmental coordination disorders and their peers without such disorders. A sports task (a hockey shot) and a learning task were compared. Applying the social cognitive model of self-regulation (by B. Zimmerman, 2000), the participants were taught to think aloud. Five categories were used: goals, knowledge, emotions, monitoring, and evaluation. Despite the similarities in the verbalizaiton by the respondents of both groups, differences in planning were recorded during sports competitions. Obviously, planned actions in sporting activities, followed by a complex of tactical-technical actions, can demonstrate significant superiority (Lloyd et al., 2006). The research into the styles of junior athletes' self-regulatory behavior in achieving a winning outcome is an examination of the psychological content parameters of managing one's psycho-emotional states, which an athlete achieves through verbal, visual, and behavioral means. These means involve self-training, creating imaginary images, and regulating muscle tone and breathing, which are used to create an individual style of self-regulatory behavior. The ability to achieve the optimal state of competitive activity is a peak of this style's development.

Hypothesis. We hypothesize that: 1) the style of self-regulatory behavior has a significant correlation with the parameters of achieving a winning outcome; 2) high levels of the parameters of the style of self-regulatory behavior will have significant differences in the context of a sports result.

The aim is to identify the dominant styles of junior athletes' self-regulatory behavior in achieving a winning outcome.

Methods

Methodology. The concept of the individual's self-regulation was developed and substantiated by M. Boryshevsky (2012). Self-regulation is considered to be a system-creating factor in the direction of an athlete's actions. A junior's self-regulatory behavior is conscious and purposeful planning, the subject's creation and transformation of their acts and actions, which are relevant to personally significant sports goals and actual tasks of sporting activities. We considered the technologies for activating young people's self-development in the context of sporting activities developed by S. Kuzikova (2017). The tenet of this empirical study is a young individual's self-development in the context of the leading type of mental activity: learning and training (Popovych & Blynova, 2019; Popovych et al., 2019c; 2021a); sports (Popovych et al., 2023b; Shaboltas, 2004), and other professional activities (Blynova et al., 2019; Zinchenko et al., 2021; 2023). We considered the

12   ---

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approaches to defining an individual's mental self-regulation as a structural unit combining goal-setting, modeling significant conditions, programming relevant actions, evaluating objective results, and correcting them in the context of competitive activity (Prokhorenko et al., 2023; Raievska et al., 2024); educational-professional (Hrys et al., 2024), sports (Krasmik et al., 2024), and other activities (Kalamazh et al., 2024; Kuzikova, 2023). We also took into account the psychophysiological patterns (Cretu et al., 2021; Galan et al., 2020; Ferraz et al., 2011; Marques et al., 2011) and content features of mental states (Kurova et al., 2023; Popovych et al., 2023a; 2019b) in the context of an individual's self-regulatory behavior.

Organization of Research. The empirical data on the participants of individual and team competitions were collected between September and December 2023 and between January and June 2024. The empirical data collection was organized in advance, before sports competitions. Collecting empirical data before sports contests allowed us to relevantly record the key dimensions of the styles of self-regulatory behavior and the parameters of a winning outcome, maintaining a high level of ecological validity. We used standardized forms of research methodologies, which were filled out by the respondents immediately before competitions or in a distance format in Google Forms. At the second stage, the results of only those participants who had achieved a winning outcome in competitions were selected and processed. The proposed confirmatory research strategy and design with comparative elements aimed at identifying the styles of self-regulatory behavior and the parameters of sports results in junior athletes, who had won. The organizers received consent from the Ethics Committee and the Educational and Methodological Councils of the universities to conduct the research. The research was in line with the principles of confidentiality, voluntariness, and awareness. The proposed study was carried out as part of the project Erasmus+ (BURN).

Participants. The research sample comprised juniors aged 15 to 19 who systematically engaged in sports and participated in sports competitions of different levels – from regional contests to national championships and international tournaments. The statistical processing involved the empirical data of junior athletes who had won prizes in individual sports or had won a tournament match in team sports. Individual sports were represented by gymnastics, freestyle wrestling, boxing, and judo (n = 77; 50.00%). Team sports were represented by football, handball, and futsal (n = 77; 50.00%). The frequency parameters of the sample population are as follows: n = 154; M = 17.34; SD = ±3.51; Me = 17.00.

Procedures and instruments. To diagnose the content features of the respondents' self-regulatory behavior, the modified version of the methodology "The Athlete's Self-Regulation Style" (ASRS) proposed by researchers I. Popovych et al. (2022a) was used. This version is a tested psychodiagnostic tool based on the classification of self-regulation styles. The methodology allowed us to find additional content dimensions of volitional regulation. The original version of the questionnaire is "The Style of Self-Regulation of Behavior" (SSB) by V. Morosanova and E. Konoz (2000). The modified version of the questionnaire was applied to characterize individual aspects of junior athletes' self-regulatory behavior qualitatively. The proposed statements are directly related to learning and training, competitive, and rehabilitative activities and contain statements that reflect typical life situations. The level of the individual style of an athlete's self-regulation (ISAS) was determined using the integral scale of the same name. The main self-regulation and volition components were represented by the following four scales: planning (PL), modeling (MD), programming (PR), and evaluating sports results (ESR). Two additional scales were used to find flexibility (F) and independence (I). These scales are essential in the context of measuring athletes' regulatory characteristics. Another psychodiagnostic tool, which allowed us to establish important parameters that are directly related to the formation of the individual style of a junior athlete's self-regulation, is "The Self-Acceptance Test" (SAT) (Bulka, 2004). The phenomenon of self-acceptance is regarded as a positive attitude towards oneself that is formed under the influence of the general positive attitudes of an athlete during their socialization. Self-acceptance combines four parameters: acceptance of one's apperarnce (AOA), acceptance of one's character (AOC), attitude towards the work done (AWD), and social behavior (SB). The test includes two pairs of statements. The indicators of empirical data homogeneity according to Cronbach's alpha were recorded at a medium level of α = .807 – .835.

Two psychodiagnostic tools were used to identify the dimensions of achieving a winning outcome – the test "The Need for Achievements" (NA) (Orlov, 1998) and the methodology "The Self-Efficacy Scale" (SES) (Sherer et al., 1982). The test "NA" (Orlov, 1998) allowed us to identify the desire for overcoming difficulties and achieving a winning outcome, directing one's efforts to sports success. Since the questionnaire "ASRS" (modified by I. Popovych et al., 2022a) contains scales, which characterize the styles and characteristics of self-regulatory activity, and interpersonal communication and subject activity are prevalent in adolescence, we attempted to study these parameters, establish correlations, and find significant differences. The method "SES" (Sherer et al., 1982) was used to determine the parameters of junior athletes' self-efficacy: self-efficacy in interpersonal communication (SEIC) and self-efficacy in subject activity (SESA). These methodologies were adapted in sports studies on the samples of junior athletes (Halian et al., 2023a; 2023b). The indicators of homogeneity according to Cronbach's alpha were recorded at a high level of α = .896 – .937.

Statistical analysis. Initially, the statistical data were processed using "MS Excel". The computer application "SPSS" version 29.01.00.01 was used to determine descriptive frequency characteristics and find statistical parameters. According to the research design, the following coefficients were established: Cronbach's alpha (α),

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the Kolmogorov-Smirnov test (λ), Pearson's correlation coefficient (R), the Mann-Whitney U-test (U), and Student's t-test.

Results

The descriptive frequency characteristics of all relevant psychological content parameters of the research were found. The empirical data corresponded to the normal distribution, confirmed by statistical calculations performed with the Kolmogorov-Smirnov test (λ). The key parameters of such descriptive statistics as the mean (M) and the squared deviation (SD) were legitimately used. Since the research design implied comparative elements of the main dimensions, a third parameter, the median (Me), was added. Tabl. 1 presents the descriptive frequency characteristics of the parameters according to the modified version of the methodology "The Athlete's Self-Regulation Style" (ASRS) (modified by Popovych et al., 2022a) and "The Self-Acceptance Test" (SAT) (Bulka, 2004).

Table 1. The main frequency descriptive characteristics of the parameters of junior athletes' self-regulation and self-acceptance styles (n = 154)

Scale	Mean (M)	Squared deviation (SD)	Median (Me)
"ASRS" (modification by Popovych et al., 2022a)			
AISRS	29.42	±4.19	4.00
PL	6.92	±2.82	3.00
MD	6.25	±1.92	2.00
PR	5.12	±2.11	2.00
ESR	6.09	±2.04	2.00
F	6.23	±1.93	2.00
I	4.43	±1.77	2.00
"SAT" (Bulka, 2004)			
AOA	5.27	±2.18	5.00
AOC	6.21	±1.90	6.00
AWD	5.33	±2.22	5.50
SB	6.04	±2.03	6.00

Note: AISRS – an athlete's individual self-regulation style; PL – planning; MD – modeling; PR – programming; ESR – evaluating sports results; F – flexibility; I – independence; AOA – acceptance of one's appearance; AOC – acceptance of one's character; AWD – attitude towards the work done; SB – social behavior.

The obtained empirical results of the descriptive frequency characteristics of all the parameters, except planning, do not have significant differences with similar junior samples (Popovych et al., 2022a). A significant superiority of our research sample over another junior sample was recorded in the parameter "planning" (t = 2.12; p $\leq$ .050). This can be explained by the fact that planning in winning athletes is the main self-regulation and volition dimension of the style of sports behavior. In the parameters of self-acceptance, the obtained data do not have significant differences with the average calculation norms of the methodology "SAT" (Bulka, 2004).

Tabl. 2 presents the descriptive frequency characteristics of the parameters according to the following two psychodiagnostic instruments: the test "The Need for Achievements" (NA) (Orlov, 1998) and the methodology "The Self-Efficacy Scale" (SES) (Sherer et al., 1982).

Table 2. The main frequency descriptive characteristics of the parameters of junior athletes' self-regulation and self-acceptance styles (n = 154)

Scale	Mean (M)	Squared deviation (SD)	Median (Me)
"The Need for Achievements" (Orlov, 1998)			
NA	15.86	±2.78	16.00
"The Self-Efficacy Scale" (Sherer et al., 1982)			
SESA	38.22	±6.73	38.00
SEIC	5.58	±1.02	5.50

Note: NA – the need for achievements; SESA – self-efficacy in subject activity; SEIC – self-efficacy in interpersonal communication.

The parameter "the need for achievements" in winning athletes has no statistically significant superiority in comparison with the data from other researchers I. Koval et al. (2024). There was a vivid trend of the need for achievements among junior winning athletes in the entire sample, but it was not statistically significant. There are no significant superiorities in the parameters of self-efficacy. The outlined dimensions indicate the above-average levels of the formation of the examined parameters.


According to the research design, the first hypothesis was tested, establishing correlations of the parameters of self-regulation and self-acceptance with the dimensions of the need for achievements and self-efficacy of junior athletes, using Pearson's correlation coefficient (R) (Tabl. 3).

Table 3. The matrix of correlations between the examined parameters (n = 154)

Parameters of self-regulation	NA	SESA	SEIC
Planning (PL)	.321**	.334**	.217*
Modeling (MD)	.188	.169	.167
Programming (PR)	.189	.178	.179
Evaluating sports results (ESR)	.259**	.156	.158
Flexibility (F)	.299**	. 268**	.166
Independence (I)	.219*	.196*	-.201*
Parameters of self-acceptance	**NA**	**SESA**	**SEIC**
Acceptance of one's appearance (AOA)	.278**	.236*	.230*
Acceptance of one's character (AOC)	.185	.167	.167
Attitude towards the work done (AWD)	.144	196*	.183
Social behavior (SB)	.203*	.174	.174

Note: NA – the need for achievements; SESA – self-efficacy in subject activity; SEIC – self-efficacy in interpersonal communication; * – p ≤ .050; ** – p ≤ .010.

Fig. I presents a pleiade of correlations of self-regulation and self-acceptance parameters with the dimensions of the need for achievements and self-efficacy of junior athletes.
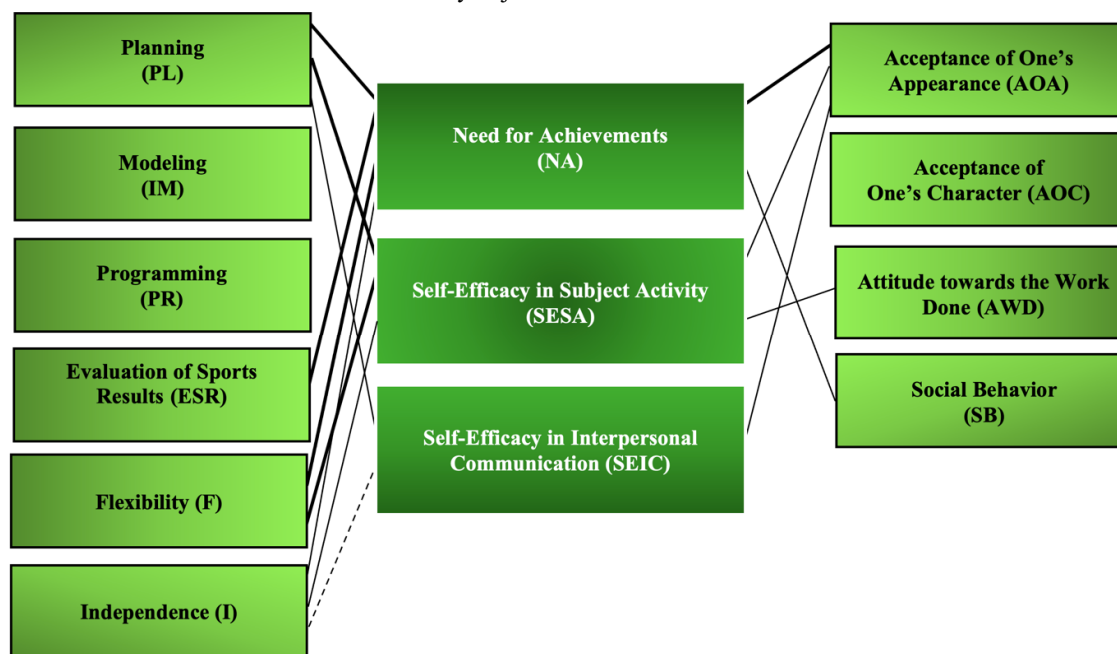
Note: - - - - - - negative correlations with p ≤ .050; ———— positive correlations with p ≤ .050; ▬▬▬ positive correlations with p ≤ .010.

Figure I. The pleiade of correlations of the respondents' self-regulation and self-acceptance with the dimensions of the need for achievements and self-efficacy (n = 154)

The correlation pleiade in combination with the correlation matrix allowed us to visualize the established correlations and explain them in the discussion. It is noteworthy that the proposed statistical operations do not allow for the identification of the direction of the influence and determination of the variables. The established statistically significant correlations only indicate important regularities of the research. Thirteen direct correlations and one inverse correlation were established. It was found that planning as a style of self-regulatory activity of juniors has all direct significant correlations with the parameters of a winning outcome: NA (R = .321; p ≤ .010), SESA (R = .334; p ≤ .010) and SEIC (R = .217; p ≤ .050). The respondents' independence is the most important characteristic of self-regulation in sporting activities. The parameter "independence" also has three significant correlations: two direct correlations – NA (R = .219; p ≤ .050), SESA (R = .196; p ≤ .050), and one inverse correlation – SEIC (R = -.201; p ≤ .050). There are no significant correlations in the parameters "modeling" and "programming". It was established that the most dependent parameter of self-acceptance is "acceptance of one's appearance", which significantly correlates with all the parameters of a winning outcome: NA (R = .378; p ≤ .010), SESA (R = .236; p ≤ .050) and SEIC (R = .230; p ≤ .050). The parameter "acceptance of one's character" has no significant correlations.

--- 15

The obtained results of correlation analysis indicate a non-linear relationship between self-regulation styles and characteristics and the parameters of a winning outcome. Even though the sample population consisted of junior winning athletes in individual and team sports, finding differences between high and low levels of the formation of the most dependent research variables (planning, flexibility, independence, and acceptance of one's appearance) is of scientific interest.

The next research stage is comparative and involves using the Mann-Whitney U-test (U). The parameters were divided into two groups by the median. For this purpose, the median was added to the descriptive frequency characteristics (see Tabl. 1). Group 1 included juniors with a high level of the parameter values (n = 64; 41.56%), Group 2 included juniors with a low level of the parameter values (n = 90; 58.64%). The percentage of individuals from each subgroup who had a high level of the parameter value was taken for comparison. Tabl. 4 presents a comparative matrix of the parameters of juniors' self-regulation.

Table 4. The comparative matrix of the parameters of juniors' self-regulation in Group 1 and Group 2

| Research variables | CM-W | Parameters of a winning outcome | | |
		NA	SESA	SEIC
Planning (PL)	U	**1121.000****	**1043.000****	**1625.000***
	p	<.001	<.001	.018
Flexibility (F)	U			
	p			
Independence (I)	U	. **1698.500***		
	p	.038		
Acceptance of one's appearance (AOA)	U			**1424.000***
	p			.012

Note: CM-W – coefficients U-test Mann-Whitney; NA – the need for achievements; SESA – self-efficacy in subject activity; SEIC – self-efficacy in interpersonal communication; U – the parameter value by the Mann-Whitney U-test; p – the level of significance by the Mann-Whitney U-test; * – the level of significance p ≤ .050 and ** – the level of significance p ≤ .010, the data is given **in bold type**.

It was found that Group 1 with a high level of the parameters of self-regulation and self-acceptance surpasses the group with a low level (Group 2) in "planning" (U = 1121.000, p <.001; U = 1043.000, p <.001; U = 1625.000, p = .018), "independence" (U = 1698.500; p = .038), and "acceptance of one's appearance" (U = 1424.000; p = .012). No significant differences were identified in any group in the parameter "flexibility". There was also no superiority of Group 2 over Group 1.

Discussion

Sports scientific-methodological studies include many publications that reveal the essence of the process, algorithm, and results of learning, training, competitive, and other types of junior athletes' sporting activities. Many scientific studies focus on the emotional component (Chebykin et al., 2024), psycho-emotional accompaniment (Plokhikh et al., 2024), the work of defense mechanisms and coping strategies (Halian et al., 2024; Pomytkina et al., 2024), important aspects of organizing learning and training space (Yaremchuk et al., 2024), which lie in the plane of self-control and responsibility, and affect self-regulatory processes. At the same time, the proposed empirical study focuses attention on self-regulation styles in the context of junior athletes' achieving a winning outcome. Given the limited possibility of applying valid and reliable psychodiagnostic tools for examining self-regulation styles, we propose a modified version of the methodology "The Athlete's Self-Regulation Style" (Popovych et al., 2022a), which has undergone all the necessary psychometric procedures. The parameters "planning", "modeling", "programming", and "evaluating sports results" formed the basis of junior athletes' self-regulation styles. The well-formed need for sports achievements is a powerful constituent of the structure of self-regulation styles of juniors' behavior. The indicators of ESR (M = 6.09; SD = ±2.04; Me = 2.00) show above-average values in the general population of junior athletes' sample (see Tabl. 1). The correlation between ESR and the need for achievements is obvious (R = .259; p ≤ .010). It was found that ESR does not have significant correlations with the other two parameters of a winning outcome – self-efficacy in subject activity and self-activity in interpersonal communication (see Tabl. 3 and Fig. I). It can be explained by the fact that junior athletes spend too much time focusing on their personality, strengths and weaknesses because of permanent evaluation of the results of their sports achievements. This, in turn, can be accompanied by the work of defense mechanisms, which prevent them from efficiently focusing on the process of learning and training. Permanent attention only to evaluating sports results causes a reduction in the quality of the process eventually affects sports achievements. Planning is the dominant and most dependent self-regulation formation of the proposed self-regulation styles (see Tabl. 3 and Fig. I), since it has all significant correlations (three) with the parameters of achieving a winning outcome and has the strongest correlations at a level of p ≤ .010 with the need for achievements (R = .321) and self-efficacy in subject activity (R = .334). Planning as a style of self-regulatory sports behavior is a permanent concentration on a certain plan accompanied by a constructive

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influence on the procedural component of learning and training. This, in turn, affects sports results, particularly on local sports achievements. The planning process gives purposefulness to a junior athlete and consists in setting a clear ultimate goal of any type of sporting activity: learning, training, competitive, or rehabilitative. The plan outlines the contours of the desirable image and generates prospects for certain time periods from the current to the future. Planning contributes to creating an algorithm of actions and operationalizes athletes' sporting activities (Popovych et al., 2023d; 2023e). Planning structures activity. Structured activity has a powerful psycho-therapeutic effect and can strengthen the will and thought (Cheban et al., 2020b). Everything provided for in the plan, through the work of a cognitive component, is differentiated into stages, then, through the algorithm of successive actions and parallel processes, is operationalized and creates the image of the ultimate goal and contributes to achieving it. Juniors' permanent learning and training activities differentiate the choice of means, methods, and conditions of working, enriching their arsenal and optimizing the resources for achieving sports results. The fact that "modeling" and "programming" do not have any correlation in our junior athletes' sample does not reduce their value as self-regulation styles but rather reflects their formation in the current dimension.

The research into the dominant styles of self-regulatory behavior of junior athletes who have achieved a winning sports outcome is a successful attempt to find out the prevalent constructs, which are statistically confirmed. The proposed hypotheses are confirmed. The styles of self-regulatory behavior have significant correlations with the three parameters of achieving a winning outcome: the need for achievements, self-efficacy in subject activity, and self-efficacy in interpersonal communication. The high values of the parameter "planning" as a style of self-regulatory behavior has significant differences in the context of sports results in three parameters (see Tabl. 4). The parameters "independence" and "acceptance of one's appearance" have a significant superiority in Group 1, which allows us to understand the self-regulatory nature of junior athletes' behavior better. We argue that planning sporting activities is the relevant and most effective style of self-regulation of junior athletes who have achieved a winning outcome. Since the sample population comprised those who had achieved a winning outcome, we assume that the general population of juniors engaging in sports may show slightly different results. This issue and a number of other aspects require statistical examination and substantiation, which will be the focus of our further research.

Conclusions

It was substantiated that the research into the styles of junior athletes' self-regulatory behavior in achieving a winning outcome is an examination of psychological content parameters of managing one's psycho-emotional state, which is achieved through verbal, visual, and behavioral means. Thirteen direct correlations and one inverse correlation of the dimensions of self-regulation and self-acceptance with the parameters of achieving a winning outcome were established. It was found that planning as a style of junior athletes' self-regulatory activity has all direct correlations with the parameters of a winning outcome ($p \leq .050$; $p \leq .010$). It was revealed that independence is the most important characteristic of self-regulation in sporting activities. The absence of correlations in the parameters "modeling" and "programming" does not reduce their value as self-regulation styles but rather reflects their formation in our research sample. It was highlighted that the parameter "evaluating sports results" has one correlation with the need for achievements and no correlation with the other two parameters – self-efficacy in subject activity and self-efficacy in interpersonal communication. It was explained that junior athletes spend too much time focusing on their personality, strengths, and weaknesses, permanently evaluating the results of their sports achievements that does not allow them to concentrate on the process of learning and training.

The obtained empirical results and theoretical conclusions should be implemented in the educational-training process of sports schools for children and youth and junior academies, which function in professional teams.

References

Blynova, O. Ye, Popovych, I. S., Bokshan, H. I., Tsilmak, O. M., & Zavatska, N. Ye. (2019). Social and Psychological Factors of Migration Readiness of Ukrainian Students. *Revista ESPACIOS, 40*(36), 4. https://www.revistaespacios.com/a19v40n36/19403604.html

Boryshevsky, M. Y. (2012). Personality in dimensions of self-awareness. Sumy: "Ellada" publishing house.

Bulka, N. I. (2004). Resources of social intelligence: adaptability, communicativeness, creativity. *Practical psychology and social work, 6*, 45–47.

Cheban, Yu., Chebykin, O., Plokhikh, V. & Massanov, A. (2020a). Mental resources for the self-mobilization of rowing athletes. *Journal of Physical Education and Sport*, 20(3), 1580–1589. https://doi.org/10.7752/jpes.2020.03216

Cheban, Yu., Chebykin, O., Plokhikh, V. & Massanov, A. (2020b). Emotional and volitional potential of self-mobilization in the organization of time perspective activity of highly qualified rowing athletes. *Journal of Physical Education and Sport,* 20(SI 6), 3128–3137. https://doi.org/10.7752/jpes.2020.s6424

--- 17

JPES ®   www.efsupit.ro

Chebykin, O., Sytnik, S., Massanov, A., & Pavlova, I. (2024). Research on the Correlation Between Emotional-Gnostic and Personal Characteristics with Parameters of Adolescents' Creativity. *Insight: the psychological dimensions of society, 11*, 105–122. https://doi.org/10.32999/2663-970X/2024-11-6

Cretu, M., Borysenko, I., Ushmarova, V., Grynyova, V., & Masych, V. (2021). Features of vascular regulation of students – future specialists in physical education and sports of different sports specializations with different body lengths. *Health, Sport, Rehabilitation, 7*(2), 29-44. https://doi.org/10.34142/HSR.2020.07.02.03

Galan, Y., Andrieieva, O., Yarmak, O., & Shestobuz, O. (2020). Programming of physical education and health-improving classes for the girls aged 12–13 years. *Journal of Human Sport and Exercise, 15*(3), 525-534. DOI: https://doi.org/10.14198/jhse.2020.153.05

Ferraz, R., van den Tillaar, R., Ferraz, S., Santos, A., Mendes, R., Marinho, D., Cretu, M., Marques, M. (2011). A Pilot Study on the influence of fatigue on kicking velocity in the soccer players. *Journal of Physical Education and Sport, 11*(2), 178–181.

Halian, I., Halian, O., & Myshchyshyn, M. (2024). Coping Strategies in the Behavioral Models of Youth in Martial Law Conditions. *Insight: the psychological dimensions of society*, 12, 44–65. https://doi.org/10.32999/2663-970X/2024-12-17

Halian, I., Popovych, I., Hulias, I., Serbin, Iy., Vyshnevska, O., Kovalchuk, Z., & Pyslar, A. (2023a). Correlation between personality traits of young athletes and their level of self-efficacy. *Journal of Physical Education and Sport, 23*(5), 1119–1129. https://doi.org/10.7752/jpes.2023.05140

Halian, I., Popovych, I., Vovk, V., Kariyev, A., Poleshchuk, L., & Halian, O. (2023b). Correlation of the coach's qualities and junior athletes' self-efficacy. *Journal of Physical Education and Sport, 23*(7), 1621–1630. https://doi.org/10.7752/jpes.2023.07199

Hrys, A., Pavliuk, O., Hoi, N., & Los, O. (2024). Strategies of Student Youth's Self-Representations in Choosing Behavioral Tendencies. *Insight: the psychological dimensions of society, 11*, 184–203. https://doi.org/10.32999/2663-970X/2024-11-10

Kalamazh, R., Voloshyna-Narozhna, V., Tymoshchuk, Y., & Balashov, E. (2024). Coping Styles and Self-Regulation Abilities as Predictors of Anxiety. *Insight: the psychological dimensions of society*, 12, 96 –114. https://doi.org/10.32999/2663-970X/2024-12-3

Koval, I., Yaremko, R., Hurtovenko, N., Sirko, R., Stelmakh, O., Slobodianyk, V., Kulyk, Y., & Hoian, I. (2024). Juniors' extreme risky behavior in the context of the structure of self-efficacy in competitive activity. *Journal of Physical Education and Sport, 24*(10), 1331–1341. https://doi.org/10.7752/jpes.2024.10257

Krasmik, Y., Aimaganbetova, O., Iancheva, T., Zhantikeyev, S., Lashko, E., Makhmytov, A., & Rakhmalin, B. (2024). Motivational determinants of athletes' self-realisation depending on their professional qualification. *BMC Psychology, 12*, 416. https://doi.org/10.1186/s40359-024-01895-3

Kurova, A., Popovych, I., Hrys, A., Koval, I., Pavliuk, M., Polishchuk, S., & Kolly-Shamne, A. (2023). Dispositional optimistic and pessimistic mental states of young athletes: gender differentiation. *Journal of Physical Education and Sport, 23(*4), 857–867. https://doi.org/10.7752/jpes.2023.04109

Kuzikova, S. (2023). Psykholohichni osnovy stanovlennia subiekta samorozvytku v yunatskomu vitsi [*Psychological foundations of becoming a subject of self-development in youth*]. Odesa: Oldi-plus.

Kuzikova, S. (2017). Methodology and technology research of personality self-development resources. Personality psychology, 8(1), 97–103. https://doi.org/10.15330/ps.8.1.97-103

Lloyd, M., Reid, G., & Bouffard, M. (2006). Self-Regulation of Sport Specific and Educational Problem-Solving Tasks by Boys with and Without DCD. *Adapted Physical Activity Quarterly*, 23(4), 370–389. https://doi.org/10.1123/apaq.23.4.370

López, L. P., Coll-Andreu, M., Torras-Garcia, M. et al. (2024). Aerobic exercise and cognitive function in chronic severe traumatic brain injury survivors: a within-subject A-B-A intervention study. *BMC Sports Science, Medicine and Rehabilitation, 16*, 201. https://doi.org/10.1186/s13102-024-00993-4

Marques, M. C., Pereira, F., Marinho, D. A., Reis, M., Cretu, M., & Tillaar, R. V. (2011). A comparison of ball velocity in different kicking positions with dominant and non-dominant leg in junior soccer players. *Journal of Physical Education and Sport, 11*(2), 159–166. https://www.efsupit.ro/images/stories/9.Mario.pdf

Morosanova, V. I. & Konoz, E. M. (2000). Style self-regulation of human behavior. *Psychology Issues, 2*, 118-127.

Orlov, Ju. M. (1998). Methods for identifying the need for reach. St. Petersburg: Peter.

Plokhikh, V., Kireieva, Z., & Skoromna, M. (2024). Emotional Accompaniment of the Organization of Time Perspective of Forced Ukrainian Migrants Staying Abroad. *Insight: the psychological dimensions of society, 11*, 15–37. https://doi.org/10.32999/2663-970X/2024-11-2

Pomytkina, L., Melnyk, N., Kovtun, O., & Kokarieva, A. (2024). Features of Life Planning Among Student Youth During Wartime and the Post-Pandemic Period. *Insight: the psychological dimensions of society*, 12, 166–190. https://doi.org/10.32999/2663-970X/2024-12-19

Popovych, I., Blynova, O., Aleksieieva, M., Nosov, P., Zavatska, N., & Smyrnova, O. (2019a). Research of Relationship between the Social Expectations and Professional Training of Lyceum Students studying in the Field of Shipbuilding. *Revista ESPACIOS, 40*(33), 21. https://www.revistaespacios.com/a19v40n33/19403321.html

Popovych, I., Blynova, O., Bokshan, H., Nosov, P., Kovalchuk, Z., Piletska, L., & Berbentsev, V. (2019b). The Research of the Mental States of Expecting a Victory in Men Mini-football Teams. J*ournal of Physical Education and Sport, 19*(4), 2343–2351. https://doi.org/10.7752/jpes.2019.04355

Popovych, I., Hoi, N., Koval, I., Vorobel, M., Semenov, O., Semenova, N., & Hrys, A. (2022a). Strengthening of student youth's mental health using play sports. *Journal of Physical Education and Sport, 22*(6), 1384–1395. https://doi.org/10.7752/jpes.2022.06174

Popovych, I., Hudimova, A., Bokhonkova, Yu., Savchuk, O., Hoian, I., & Shevchenko, N. (2023a). Dispositional Mental States of Internally Displaced University Teachers Under Martial Law: Gender Differences. *Journal of Education Culture and Society, 14*(2), 171–187. https://doi.org/10.15503/jecs2023.2.171.181

Popovych, I., Hulias, I., Serbin, Iy., Piletska, L., Mashchak, S., & Zahrai, L. (2023b). Psychological content parameters of attention in the structure of time perspective of young female athletes: comparative analysis. *Journal of Physical Education and Sport, 23*(1), 152–161. https://doi.org/10.7752/jpes.2023.01019

Popovych, I., Kosmii, M., Hrys, A., Hoi, N., Dyhun, I., Hoian, I., & Nosov, P. (2023c). Pre-competition expectation profiles among junior athletes in the context of altered sporting conditions. *Journal of Physical Education and Sport, 23*(10), 2551–2562. https://doi.org/10.7752/jpes.2023.10293

Popovych, I. S., & Blynova, O. Ye. (2019). Research on the Correlation between Psychological Content Parameters of Social Expectations and the Indexes of Study Progress of Future Physical Education Teachers. *Journal of Physical Education and Sport, 19*(SI 3), 847–853. https://doi.org/10.7752/jpes.2019.s3122

Popovych, I., Plokhikh, V., Hrys, A., Pavliuk, M., Nosov, P., & Zinchenko, S. (2023d). Operationalization of footballers' emotional intelligence in the dimensions of motivational orientation: analysis based on the basic positions. *Journal of Physical Education and Sport, 23*(3), 772–781. https://doi.org/10.7752/jpes.2023.03095

Popovych, I., Radul, I., Hoian, I., Ohnystyi, A., Doichyk, V., & Burlakova, I. (2022b). Athletes' resilience typology: a comparative analysis of individual and team sports. *Journal of Physical Education and Sport, 22*(9), 2036–2046. https://doi.org/10.7752/jpes.2022.09260

Popovych, I., Shevchenko, A., Galvez, L. M., Klenina, K. (2021a). Research of the relationship between social desirability and value orientations of adolescents. *Revista Notas Históricas y Geográficas, 26*, 241–268. https://www.revistanotashistoricasygeograficas.cl/index.php/nhyg/article/view/339

Popovych, I., Shevchenko, N., Raievska, Ya., Myshchyshyn, M., Hoian, I., Yakovleva, S., & Los, O. (2023e). Operationalization of physical work ability of young athletes in terms of psychological well-being. *Journal of Physical Education and Sport, 23*(6), 1456–1464. https://doi.org/10.7752/jpes.2023.06178

Popovych, I., Shcherbak, T., Kuzikova, S., Blynova, O., Nosov, P., & Zinchenko, S. (2021b). Operationalization of tactical thinking of football players by main game roles. *Journal of Physical Education and Sport, 21*(5), 334, 2480–2491. https://doi.org/10.7752/jpes.2021.05334

Popovych, I. S., Zavatskyi, V. Yu., Geyko, Ie. V., Halian, O. I., Zavatskyi, Yu. A., & Radul, I. H. (2019c). Research on the Structure, Variables and Interdependence of the Factors of Tourists' Mental States of Expectation for Leisure in Ukraine. *Revista ESPACIOS, 40*(37), page 22. https://www.revistaespacios.com/a19v40n37/19403722.html

Prokhorenko, L., Popovych, I., Sokolova, H., Chumaieva, Yu., Kosenko, Yu., Razumovska, T., & Zasenko, V. (2023). Gender differentiation of self-regulating mental states of athletes with disabilities: comparative analysis. *Journal of Physical Education and Sport, 23*(2), 349–359. https://doi.org/10.7752/jpes.2023.02042

Raievska, Y., Savchuk, J., Hulias, I., Khokhlov, A., Hoian, I., Syniakova, V., Soroka, O., & Lukashov, O. (2024). Mechanism of comparison in the structure of self-efficacy in junior athletes' sporting activities. *Journal of Physical Education and Sport, 24*(6), 1349–1359. https://doi.org/10.7752/jpes.2024.06153

Shaboltas, A. M. (2004). Motives for playing sports. Kyiv: Olympic Literature.

Shcherbak, T., Popovych, I., Kariyev, A., Duisenbayeva, A., Huzar, V., Hoian, I., & Kyrychenko, K. (2023). Psychological causes of fatigue of football players. *Journal of Physical Education and Sport, 23*(8), 2193–2202. https://doi.org/10.7752/jpes.2023.08251

Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The Self-Efficacy Scale: Construction and Validation. *Psychological Reports, 51*(2), 663-671. https://doi.org/10.2466/pr0.1982.51.2.663

Vasiliev, N. N. (2007). Conflict resolution training. St. Petersburg: Rech.

--- 19

Yaremchuk, N., Pinchuk, N., Kalahurka, K., & Turko, B. (2024). Formation of Professional Identity of Future Teachers under Conditions of a Digital Educational Environment. *Insight: the psychological dimensions of society*, *12*, 229–249. https://doi.org/10.32999/2663-970x/2024-12-8

Zarytska, V. V., & Bekinov, L. B. (2017). Features of emotional self-regulation of young women. *Bulletin of KhNPU named after H. S. Skovorody. Psychology, 55*, 26–36.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.

Zinchenko, S., Kobets, V., Tovstokoryi, O., Nosov, P., & Popovych, I. (2023). Intelligent System Control of the Vessel Executive Devices Redundant Structure. *CEUR Workshop Proceedings, 3403*, 582–594. https://ceur-ws.org/Vol-3403/paper44.pdf

Zinchenko, S., Moiseienko, V., Tovstokoryi, O., Nosov, P., & Popovych, I. (2021). Automatic Beam Aiming of the Laser Optical Reference System at the Center of Reflector to Improve the Accuracy and Reliability of Dynamic Positioning. In: Hu, Z., Petoukhov, S., Dychka, I., He, M. (eds). Advances in Computer Science for Engineering and Education IV. ICCSEEA 2021. *Lecture Notes on Data Engineering and Communications Technologies, 83*. Springer, Cham. https://doi.org/10.1007/978-3-030-80472-5_1