

Junior athletes' behavioral self-regulation styles within the dimensions of psychological safety in the learning and training environment

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Abstract:

This study analyzes the prominence of dominant behavioral self-regulation styles among junior athletes within the context of psychological safety in their learning and training environment. **Methods.** The randomly selected sample was representative of the general population and consisted only of junior athletes attending Olympic Reserve sports schools for children and youth, totaling 89 participants. These junior athletes, aged 14–19, were educated and trained full-time at sports institutions in Ukraine. Participants included athletes from team sports (handball and football) as well as individual sports (rhythmic gymnastics, freestyle wrestling, artistic gymnastics, and weightlifting). The research participants were prize-winners and winners of regional, national, and European championships and regularly competed in Ukrainian and international tournaments. The parameters of the main variables (self-regulation styles and psychological safety of the learning and training environments) and the additional variable (internality in sports activities) were determined using valid, representative, and reliable methodologies. **Results.** Fifteen direct correlations between the studied variables were established. It was empirically proved that the self-regulation style, “modeling”, and the parameter of psychological safety, “comfort”, are the most dependent and loaded parameters. It was substantiated that creating behavioral models in the constructive and safe learning and training space is an effective way for junior athletes’ professional growth. It was found that the three self-regulation styles (planning, modeling, and programing), in combination with pronounced independence and high levels of comfort and social-psychological safety, constitute a latent resource of the optimal learning and training environment. It was established that a high level of comfort in the learning and training environment contributes to developing the self-regulation styles – “programming” and “modeling”. **Discussion and conclusions.** It was substantiated that the research into junior athletes’ behavioral self-regulation styles in the dimensions of psychological safety of the learning and training environment means determining the levels of self-regulatory readiness for relevant activities under the influence of safety factors combined in the continuum “satisfaction–harmony–comfort”. It was explained that the dominant styles of junior athletes’ self-regulation reflect juniors’ managerial ability to regulate their psycho-emotional states, exerting influence on themselves through self-discipline, self-hypnosis, imaginary images, auto-training technologies, muscle tone management, and breathing techniques. The established psychological correlations and the identified significant differences in the levels of the studied parameters possess scientific novelty. They can be implemented in the learning and training process at sports educational institutions.

Keywords: self-actualization, motivation, mental health, safety, academic and professional activity, mental state, stress, independence.

Introduction

The development of a junior athlete’s personality is a process of continuous self-movement and constant renewal through reconstructing the discrete structures of the body and psyche. In the individual’s growth and development, interrelations and inter-influences are in the inseparable dialectical unity with the surroundings and accompanied by permanent reconstruction, with the gradual complication and improvement of the interaction between relevant systems (Kremen, 2014). The athlete’s self-regulation is a functional expression of the coordinated work of internal and external conditions, effects, and impacts. M. Boryshevsky (2012) believes that self-regulation is a universal phenomenon that directly or indirectly relates to any manifestation of activeness, is a component of the structures of processes and systems with different levels of complexity, and is partially

associated with the terms “self-organization” and “self-management”. Self-regulation is the process and result of managing oneself and regulating one’s actions and mental states. The methodology of the research into dominant mental states proposed by I. Popovych et al. (2019b; 2021) was tested in sports activities and other relevant human activities (Popovych et al. (2019c; 2023c) and corroborated that self-regulatory activeness is accompanied by selective attention (Popovych et al., 2023a) and manifests in the focus and concentration of the subject’s consciousness on selected objects of permanent or situational value. Volitional motives play a key role in self-regulatory readiness (Krasnik et al., 2024). The volitional content of the junior athlete’s self-regulation motives develops into a unique hierarchical complex as the individual considers, weighs, and assesses the external circumstances of learning, training, and competitive activities, their skills, and the ability to align them with the desired goal. In adolescence, at the stage of forming worldviews and professional self-realization, a personal self-regulation style dynamically develops.

To a large extent, this depends on social experience gained by the junior athlete in learning, training, and competitive activities. Even the most successful and emotionally stable junior athletes need support and psychological guidance. Sports studies show that new psychological formations have a considerable impact on personality growth and development (Popovych et al., 2019a) and determine the content of pre-competition expectations and sports training (Popovych et al., 2020; 2023b). Researchers M. Diachenko and V. Tyshchenko (2025) found that the content of psycho-emotional readiness in the structure of sports training determines the effectiveness of sports activities. The process and result of competitive activity largely depend on volitional regulation, the level of anxiety, and the capacity for emotional control. The studies by Yu. Cheban et al. (2020a; 2020b) show that elite athletes’ emotional and volitional potential is the most effective method of self-regulatory influence. The unity of the experience of the “past”, actualization of the “future”, and regulation of the “present” can ensure maximum sports success.

Researchers S. Vella et al. (2022) systematically reviewed the concepts of psychological safety in sports and drew the following conclusions: 1) psychological safety is a permanent construct of the group level, which is perceived and instantly reflected at the personal level; 2) psychological safety is a construct that connects athletes’ successfulness with mental health; 3) a descriptive model of psychological safety in sports is proposed. The research into the attributive style of athletes’ psychological safety and burnout by Y. Kotani et al. (2024) did not establish a direct correlation. The worse performance was somewhat related to a change in the game role in the team, the undervaluation of personal competitive achievements, and the lack of effective communication with teammates. Sports outcomes, competitive efficacy, and mental health do not always have a strong direct relationship (Da Costa Dutra et al., 2023; Edmondson et al., 2002). Sometimes, sports records cause traumas that winners do not always mention, and untreated injuries have been found to lead to relapses and chronic diseases (Shcherbak et al., 2023). Researchers C. Walton et al. (2024) underscore that elite athletes often resort to the “win-at-all-costs” approach. The desire to be oneself, not to hide behind a comfortable mask, to be assertive, and to promote cultural norms in teams will contribute to improving mental health. At the level of elite teams, it is advisable to create models of psychological safety and mental health.

The proposed models of health improvement in academic and professional activities in group sports showed a significantly positive result (Popovych et al., 2022). The desire to achieve the maximum result and even surpass teammates dominates in junior athletes’ behavior, which is accompanied by permanent social comparison. This comparison can have an inspiring or destabilizing effect (Raievska et al., 2024). Studies on self-efficacy (Halian et al., 2023a; 2023b) revealed a direct relationship between junior athletes’ personality traits and competitive performance and showed that the two-factor structure of efficacy is relevant and dependent on the coordinated work with the coach. The research by L. Prokhorenko et al. (2025) established a correlation between self-efficacy and intrinsic motivation. It proved that the optimal level of such components of self-regulation as intrinsic motivation, self-control, and self-discipline can maintain the junior athlete’s competitive tone within manageable boundaries. The outlined self-regulatory readiness can ensure the highest self-efficacy of juniors. Juniors’ self-efficacy is closely related to risk-taking (Koval et al., 2024). Since mental self-regulation is one of the levels of regulating a living system’s activity, it can express the specificity of mental resources for reflecting and modeling reality, particularly through the subject’s reflection (Kuzikova, 2017). We can summarize that a junior’s self-regulation is carried out in the unity of its energetic, dynamic, and content aspects. In junior athletes’ learning and training activities, self-regulation styles can have the following structure: the goal of activity, the model of significant conditions of activity, the program of actions, the system of success criteria, the feedback about the achieved result, the evaluation of the compliance of competition results with success criteria in sports, and the program for adjusting and improving academic and training activities.

The research into junior athletes’ self-regulation styles in the dimensions of psychological safety of the learning and training environment means determining the levels of self-regulatory readiness for relevant activities under the influence of safety factors combined in the continuum “satisfaction–harmony–comfort”. The dominant styles of juniors’ self-regulation reflect junior athletes’ ability to manage their psycho-emotional state, exerting self-influence through self-discipline, self-hypnosis, imaginary images, auto-training technologies, muscle tone management, and breathing techniques. Combining these techniques in the dimensions of the

leading type of mental activity, which is the learning and training activity for juniors, allows us to examine the development and manifestation of behavioral self-regulation styles.

Hypothesis. We assume that the parameters “satisfaction”, “harmony”, “comfort”, and “social-psychological safety” of the learning and training environment will have a natural correlation with the parameters of junior athletes’ self-regulation; high values of the parameters of psychological safety will have significant differences in the styles of respondents’ behavioral self-regulation.

The aim is to identify the styles of junior athletes’ behavioral self-regulation in the dimensions of psychological safety of the learning and training environment at sports schools of the Olympic Reserve for children and youth.

Methods

Methodology. The methodological tenets of the individual’s self-regulation were developed and implemented in academic and professional activities by M. Boryshevsky (2012). Junior athletes were considered the subjects of sports activities who can make decisions independently and possess well-developed self-regulatory readiness, proper self-discipline, and a sufficient level of self-control, which are outlined in the concept by S. Kuzikova (2017). The unity of the factors “satisfaction–harmony–comfort”, proposed by T. Eksacusto (2009), conceptually outlined the psychological safety of the learning and training environment. To relevantly assess the key aspects of our research, we carried out a retrospective study of the following areas: 1) psychophysiological patterns in the dimensions of self-regulation and security situation (Cretu et al., 2021; Ferraz et al., 2011; Marques et al., 2011); 2) regularities of educational activity (Hoi et al., 2025; Huias et al., 2025; Kremen & Ilyin, 2020; 2022; Topuzov et al., 2022) and the content component of professional activity (May et al., 2004; Walumbwa & Schaubroeck, 2009); 3) analysis of coping strategies and defense mechanisms in adverse conditions of activity (Hoian et al., 2025; Olefir & Bosniuk, 2025; Plokhikh & Bilous, 2025; Popovych et al., 2023d; Yablonska et al., 2025); 4) adaptive potential in changed and adverse conditions of activity (Blynova et al., 2019; Coates & Mason, 2025; Steiner et al., 2010) and other modern empirical studies examining the role of the subject of activity (Zinchenko et al., 2020; 2023).

Organization of Research. The learning and training process at sports schools of the Olympic Reserve for children and youth was full-time. Between February and April 2025, empirical material was collected in class by filling out standard methodology forms. The research was approved by the Academic and Methodological Councils of universities. The procedure was agreed with the ethics committees. Consent from the administrations of educational institutions was received in advance. The participants were informed about the aim and time of the survey. All participants’ participation was voluntary and confidential. Compliance with the basic requirements for conducting research allowed us to obtain quality empirical material. The research into juniors’ behavioral self-regulation styles in the dimensions of psychological safety of the learning and training environment was carried out within the framework of the Erasmus+ project (BURN).

Participants. The respondents – junior athletes – were selected randomly. The sample relevantly reflected the general population. All the research participants attended sports schools of the Olympic Reserve for children and youth: SSSYOR №1 (Ivano-Frankivsk, Ukraine), LSSCY Enerhetyk” (Lviv, Ukraine), and LSSPC (Lviv, Ukraine). The sample consisted of $n = 89$ people. The junior athletes aged 14 to 19 pursued education and training. The participants included representatives of team sports ($n = 42$; 47.19%): handball and football, and individual sports ($n = 47$; 52.81%): rhythmic gymnastics, freestyle wrestling, artistic gymnastics, and weightlifting. The research participants were prize-winners and winners of regional, national, and European championships and competed in Ukrainian and international tournaments. The descriptive frequency characteristics of the sample are as follows: $M = 16.29$; $Me = 16.50$; $SD = \pm 2.94$.

Procedures and Instruments. The main psychodiagnostic tool used to identify self-regulation styles was the modified version of the test “Athlete’s Self-Regulation Style” (ASRS), which proved to be effective in the research by I. Popovych et al. (2022). This methodology was developed by V. Morosanova and E. Konozy (2000) and is known as the “Behavioral Self-Regulation Style” (BSRS). The modified version focuses on statements reflecting situations of young people’s learning, training, competitive, restorative, and everyday activities. This methodology allowed us to identify four styles of behavioral self-regulation: planning (PL), modeling (MD), programming (PR), and evaluation of results (ER). Moreover, two important dimensions of the process of mental self-regulation – flexibility and independence – were also considered. The empirical data homogeneity measured using Cronbach’s coefficient was recorded at a satisfactory level – $\alpha = .768$.

The parameters of psychological safety were determined using the methodology “Socio-Psychological Safety of Subject” (SSS) (Eksacusto, 2009). Safety dimensions combined in the continuum “satisfaction–harmony–comfort” were established. Three main scales: satisfaction (S), harmony (H), and comfort (C), and one integral scale – social-psychological safety (SPS) – were used. The data homogeneity was recorded at a high level – $\alpha = .921$. The questionnaire “Level of Subjective Control” (LSC) (Rotter, 1966) was used to determine a single parameter – “internality in sports activities” (ISA). The rest of the scales of “LSC” (Rotter, 1966) were not used in the research. The data on the methodology were processed to find α -Cronbach. This coefficient showed a high level of data homogeneity – $\alpha = .944$.

Statistical analysis. “MS Excel” and “SPSS”, version 29.01.00.01, were used to process the initial data, determine frequency characteristics, and perform statistical operations. Standard statistical coefficients were applied. Significance levels of at least $p \leq .050$ were considered in analysis and substantiation. Trends were not subject to analysis.

Results

All variables used in our study were given through descriptive frequency characteristics to comply with the principle of research reproducibility. Only the main characteristics (the mean (M), the squared deviation (SD), and the median (Me)) were presented. The values of excess (Ec) and asymmetry (A) showed that none of the measurement scales had a normal distribution. This allowed for the legitimate use of non-parametric statistical coefficients. Tabl. 1 shows the descriptive frequency characteristics of self-regulation styles and features according to the modified version of the methodology “Athlete’s Self-Regulation Style” (Popovych et al., 2022), the parameters of psychological safety of the learning and training environment according to the methodology “Socio-Psychological Safety of Subject” (Eksacusto, 2009), and the parameter “internality in sports activities” according to the questionnaire “Level of subjective control” (Rotter, 1966).

Table 1. Descriptive frequency characteristics of the studied variables (n = 89)

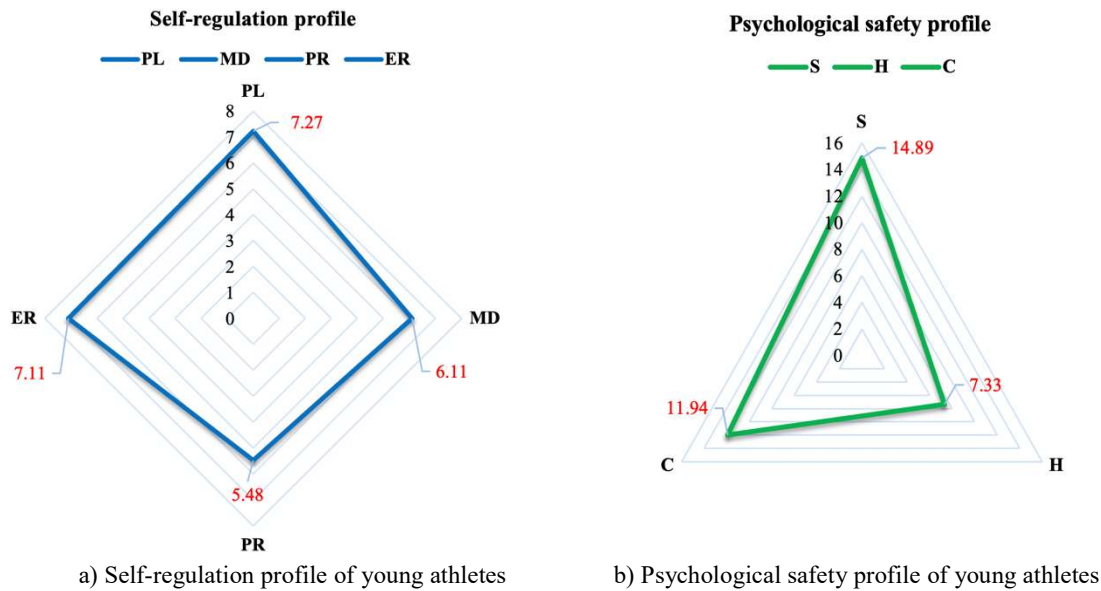
Scale	Mean (M)	Squared Deviation (SD)	Median (Me)
Self-Regulation Styles by “ASRS” (modification by Popovych et al., 2022)			
Planning (PL)	7.23	± 1.21	7.00
Modeling (MD)	6.11	± 1.03	6.00
Programming (PR)	5.48	$\pm .94$	5.50
Evaluation of results (ER)	7.11	± 1.19	7.00
Self-Regulation Features by “ASRS” (modification by Popovych et al., 2022)			
Flexibility (F)	4.21	$\pm .72$	4.00
Independence (I)	6.39	± 1.06	6.50
“Socio-Psychological Safety of Subject” (Eksacusto, 2009)			
Satisfaction (S)	14.89	± 2.48	15.00
Harmony (H)	7.33	± 1.25	7.50
Comfort (C)	11.94	± 1.99	12.00
Social-psychological safety (SPS)	36.29	± 6.05	36.50
“Level of Subjective Control” (Rotter, 1966)			
Internality in sports activities (ISA)	39.22	± 6.55	39.50

The empirical data homogeneity for all the methodologies was measured using Cronbach’s alpha coefficient (α). The range of values for the methodologies was found to be from $\alpha = .768$ to $\alpha = .944$, which met the requirements since the measurements were satisfactory to high levels.

The obtained data were verified with the descriptive frequency characteristics obtained in other studies on junior samples (Popovych et al., 2019a; 2019b). The descriptive frequency characteristics were compared with the average norms identified in the psychometric procedures performed by the authors of the methodologies and the researchers who adapted, modified, or tested them (Bokhonkova et al., 2025; Eksacusto, 2009; Popovych et al., 2022). Comparison of the data with the results of the average norms and empirical measurements found in open access studies related to junior sports samples did not reveal significant differences ($p \leq .050$; $p \leq .010$).

The identified styles of behavioral self-regulation allowed us to create a profile of the junior athlete’s self-regulation. Fig. I (a) graphically presents the profile as a petal diagram. The self-regulation contour (a blue line) outlines the area, which is interpreted as a graphical representation of the junior athlete’s self-regulatory readiness. Such a profile should be created individually.

During the learning and training process at sports schools, cross-sections should be compared with previous profiles and other participants’ profiles. Fig. I (b) graphically presents the junior athlete’s psychological safety profile. The psychological safety contour (a green line) outlines the area, which is interpreted as a graphical representation of the junior athlete’s psychological safety. Similarly, this profile should be created individually and compared with previous cross-sections or other participants’ profiles.



Note: — self-regulatory readiness profile; — psychological safety profile; PL – planning; MD – modeling; PR – programming; ER – evaluation of results; S – satisfaction; H – harmony; C – comfort.

Figure I. Petal diagrams of juniors' behavioral self-regulation styles and psychological safety of the learning and training environment

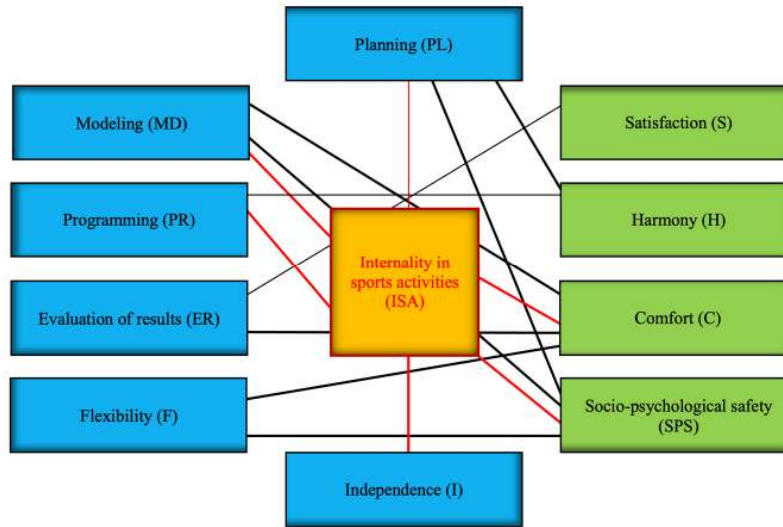
According to the confirmatory research strategy, we established psychological correlations between the studied variables. Spearman's correlation coefficient (r_s) was used to establish correlations since the extreme values of asymmetry and excess significantly differed from a normal symmetrical distribution. Tabl. 2 shows the correlation matrix of the studied variables.

Table 2. Correlation matrix of the studied variables (n = 89)

Scales	Spearman's coefficient	Studied variables			
		S	H	C	SPS
PL	r_s		.332**		.345**
	p		<.001		<.001
MD	r_s			.323**	.343**
	p			<.001	<.001
PR	r_s		.201*		.432**
	p		.017		<.001
ER	r_s	.211*		.289**	
	p	.020		<.001	
F	r_s			.393**	.298**
	p			<.001	<.001
I	r_s				.417**
	p				<.001
ISA	r_s		.284**	.263**	1.00
	p		.002	.004	-

Note: PL – planning; MD – modeling; PR – programming; ER – evaluation of results; F – flexibility; I – independence; ISA – internality in sports activities (given *in italics*); r_s – Spearman's coefficient; p – level of significance; S – satisfaction; H – harmony; C – comfort; SPS – social-psychological safety; * – correlation at $p \leq .050$; ** – correlation at $p \leq .010$ and $p < .001$ (**bold type**).

Fig. II shows a correlation pleiade of the studied variables that characterize behavioral self-regulation styles, the most congruent features of junior athletes' self-regulatory readiness, the parameters of psychological safety, and the mediator variable – internality in sports activities. The visualization of psychological correlations aimed to display the mediating role of internality in sports activities graphically.



Note: ——— direct correlations between the variables of self-regulation styles and features and psychological safety at $p \leq .050$; ——— direct correlations between the variables of self-regulation styles and features and psychological safety at $p \leq .010$ and $p < .001$; ——— direct correlations with the mediator variable at $p \leq .050$; ——— direct correlations with the mediator variable at $p \leq .010$ and $p < .001$.

Figure II. Correlation pleiade of the variables of self-regulation styles and features, the parameters of psychological safety and internality in sports activities ($n = 89$)

Fifteen direct correlations were recorded. The strongest direct correlation was established between the self-regulation style “programming” and ISA ($r_s = .432$; $p < .001$). Internality in sports activities has the largest number of psychological correlations – six. We should underscore the accurate choice of the mediator variable. All the parameters have correlations. Independence with one correlation and satisfaction with interpersonal relationships as a condition for psychological safety with one correlation are the most autonomous parameters.

The next stage involved determining the expressivity of the four self-regulation styles in comparing the groups with low and high levels of the parameters of psychological safety using the Mann-Whitney U-test (U). The division of participants into groups was based on the median. The data were taken from Tabl. 1. Group 1 comprised juniors with a high level of psychological safety. Group 2 consisted of juniors with a low level of psychological safety. Tabl. 3 shows the results of comparing juniors’ self-regulation parameters.

Table 3. Comparative matrix of juniors’ self-regulation parameters in Group 1 and Group 2

Self-regulation styles	CM-W	Parameters of psychological safety			
		S	H	C	SPS
Planning (PL)	U		1019.500**		1444.000*
	p		<.001		.017
Modeling (MD)	U			1121.000**	
	p			<.001	
Programing (PR)	U			945.000**	
	p			<.001	
Evaluation of results (ER)	U				
	p				

Note: CM-W – coefficients U-test Mann-Whitney; S – satisfaction; H – harmony; C – comfort; SPS – social-psychological safety; U – the value of the Mann-Whitney parameter; p – the level of significance by the Mann-Whitney U-test; * – the level of significance $p \leq .050$ and ** – the level of significance $p \leq .010$, the data is given in **bold type**.

It was established that juniors with a high level of psychological safety parameters (Group 1) have a significant superiority in three styles of behavioral self-regulation: in planning by two parameters – “harmony” ($U = 1019.500$, $p < .001$) and “social-psychological safety” ($U = 1444.000$, $p = .017$); in modeling by the parameter “comfort” ($U = 1019.500$, $p < .001$), and in programming by the parameter “comfort” ($U = 945.000$, $p < .001$). No significant difference was recorded in the style “evaluation of results” for any of the groups. We can state that Group 2 (the group with low levels of psychological safety) has no superiority in any style of behavioral self-regulation.

Discussion

The scientific problem of behavioral self-regulation styles and psychological safety of the learning and training environment is not new for sports psychology. Numerous scientific empirical studies are directly (Burns et al., 2024; Şenel et al., 2024; Van Puyenbroeck et al., 2018) or indirectly related to the issues of junior samples (Afanasyeva et al., 2025; Kariyev et al., 2025; Limasheva et al., 2025; Peralta et al., 2024; Raievska et al., 2025).

The descriptive frequency characteristics of valid methodologies (see Tabl. 1) relevantly reflected the styles and features of behavioral self-regulation and outlined the parameters of psychological safety of the learning and training environment at sports schools. The self-regulation style “planning” ($M = 7.23$; $SD = \pm 1.21$) was found to be the most pronounced. It was followed by the style “evaluation of results” ($M = 7.11$; $SD = \pm 1.19$). We can explain this by the specificity of organizing the learning and training process, which has distinct planning and result components. In turn, this is interiorized into internal personal regulations, which affect the dominance of respondents’ behavioral styles. This interpretation is confirmed by the concept of self-regulation by M. Boryshevsky (2012). The self-regulation styles “modeling” ($M = 6.11$; $SD = \pm 1.03$) and “programming” ($M = 5.48$; $SD = \pm 0.94$) were found to be the least pronounced, and this trend is observed in other areas. However, the studies of the Olympic champion Yu. Cheban et al. (2020a; 2020b), conducted on the samples of elite athletes, significantly show that programming the training and modeling the image of a powerful mechanism, in combination with self-discipline, can have a significant impact and ensure a winning outcome. We can summarize that our empirical data are corroborated by these studies. Obviously, the recorded expressivity of junior athletes’ self-regulation styles “modeling” and “programming” depends on the development of their self-regulation, self-control, self-education, and self-discipline. Junior athletes are on the way to self-improvement. The key features of self-regulation – “flexibility” ($M = 4.21$; $SD = \pm 0.72$) and “independence” ($M = 6.39$; $SD = \pm 1.06$) – allow us to infer that junior athletes largely strive to demonstrate their autonomous position, which is not flexible or constructive, but tends to convergence and determination in decision-making, which is corroborated by the study by N. Shevchenko and I. Obyskalov (2025).

The parameters of psychological safety of the learning and training environment showed that “satisfaction”, which lies in the plane of trusting personal relationships, is the most pronounced ($M = 14.89$; $SD = \pm 15.42$) on three main scales. Harmony, as a derivative parameter of satisfaction, which rather indicates the coherence of the subject’s thoughts, judgments, expectations, and attitudes, and outlines the content component of psychological safety, is the least pronounced ($M = 7.33$; $SD = \pm 2.48$). This difference in these parameters can demonstrate a high level of contradictions and dynamics of interpersonal relationships. This range of values is considered optimal for the junior sample. It is more important that contradictions result in the search for constructive decisions rather than stagnation and plateau in professional growth. The parameter “comfort” ($M = 11.94$; $SD = \pm 1.99$) was found to be moderately pronounced. According to T. Eksacusto (2009), comfort is a rather complex psychological formation that is regarded as security. This feature possesses an objective dimension – the absence of violations and difficulties, and a subjective dimension – the junior athlete’s resistance to such destructive manifestations as insults, threats, neglect, and manipulation. The proposed profiles of self-regulation styles (see Fig. I, a) and psychological safety (see Fig. I, b) are applied in nature and can be operationalized using modern technologies, such as artificial intelligence, into the learning and training environment of sports schools. This scientific initiative is consistent with creating the affective profile of athletes and implementing it in training athletes, as shown in the study by M. Guillaume (2023). Changes dictated by current realities determine psychological safety, which can affect the junior athlete’s self-regulation styles, primarily through the work of cognitive systems. Accordingly, psychological safety determines the work of self-regulation systems. Independence is the most autonomous dimension, which may pose a latent danger under unfavorable circumstances. At the same time, with psychologically relevant work, junior athletes’ independence can be transformed into a latent resource through self-education, self-discipline, and the development of self-regulatory readiness and emotional maturity.

The psychological correlations (see Tabl. 2 and Fig. II) demonstrated a complex combination of direct relationships with different significance levels. The self-regulation style “modeling” and the parameter of psychological safety “comfort” are the most dependent and loaded parameters. Creating behavioral models in the constructive and safe learning and training environment is an effective way for athletes’ professional growth. Notably, the three styles of behavioral self-regulation: planning, modeling, and programming, in combination with pronounced independence, constitute a latent resource of the optimal learning and training environment if it has high parameters of comfort and social-psychological safety.

Determining the expressivity of the four self-regulation styles in comparing the groups with low and high levels of the parameters of psychological safety (see Tabl. 3) corroborated our previous studies showing that the “comfort” parameter contributes to developing the self-regulation styles – “programming” and “modeling”. The research also revealed that the constant focus on evaluating results without the efficiently organized procedural component does not dominate. The self-regulation style “planning” shows superiority in the parameters of harmony and social-psychological safety. This indicates that the coherence of junior athletes’ thoughts, opinions, and actions in the dimensions of social-psychological safety can be effective in the learning and training environment.

The aim was achieved, and two hypotheses were confirmed. The obtained empirical results, the created profiles, and the identified significant differences are of scientific value. They can be implemented in organizing the learning and training space of sports schools of the Olympic Reserve for children and youth.

Conclusions

It was substantiated that the research into junior athletes' behavioral self-regulation styles in the dimensions of psychological safety of the learning and training environment means determining the expressivity of self-regulatory readiness for relevant activities under the influence of safety factors, which are combined in the continuum "satisfaction–harmony–comfort". It was explained that the dominant styles of juniors' self-regulation reflect junior athletes' managerial ability to regulate their psycho-emotional states, exerting self-influence through self-discipline, self-hypnosis, imaginary images, auto-training technologies, muscle tone management, and breathing techniques. Fifteen direct correlations were established. It was found that the parameter "internality in sports activities" has the largest number of psychological correlations (six) and performs a mediating function. It was empirically proved that the self-regulation style "modeling" and the parameter of psychological safety "comfort" are the most dependent and loaded parameters. It was substantiated that creating behavioral models in the constructive and safe learning and training environment is an effective way for their professional growth. It was found that the three styles of behavioral self-regulation (planning, modeling, and programming), in combination with pronounced independence and the high expressivity of comfort and social-psychological safety, constitute a latent resource of the optimal learning and training environment. It was established that the high expressivity of "comfort" of the learning and training environment contributes to developing the self-regulation styles – "programming" and "modeling".

The established psychological correlations and the identified significant differences in the expressivity of the research parameters possess scientific novelty. They can be implemented in the learning and training process of sports educational institutions.

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