



Individual-typological and socio-psychological features of university students with different levels of readiness to participate in sports competitions

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Abstract

Objective of the study was to study the individual typological and socio-psychological characteristics of university students with different levels of subjective readiness to participate in sports competitions.

Methods and structure of the study. 356 students (142 boys, 214 girls) of 1st–3rd year students of Nizhnevartovsk State University took part in the scientific work. All participants provided consent to conduct diagnostics and process personal data.

Results and conclusions. An individual's subjective readiness to participate in competitions is correlated with indicators of extraversion and introversion. Students with a dominant choleric type of temperament show greater readiness to participate in sports competitions, while those with a melancholic type show the least readiness. Among students with predominant sanguine and phlegmatic types of temperament, such tendencies were not identified. Constructive behavioral strategies for interpersonal interaction (cooperation and compromise) are noted among individuals with an average and above average level of readiness to engage in rivalry in competitive conditions. Students who are ready to take part in competitions demonstrate the best results in testing strength endurance, which requires the manifestation of volitional efforts. The results obtained indicate the need to search for and scientifically substantiate new competitive practices that satisfy the individual characteristics of university students, and their implementation in educational and extracurricular forms of physical education.

Keywords: *readiness, temperament, individual characteristics, strategy of behavior in interpersonal interaction, model of organizing competition, physical education.*

Introduction. The insufficient participation of student youth in mass physical culture and sports events makes it urgent to conduct additional research to study the factors that influence the indicator of readiness of boys and girls to realize their own capabilities in competition conditions [2, 4]. From the position of the personal approach, readiness, as a fundamental basis of activity, reflecting the presence of training, certain abilities, as a conscious attitude to the upcoming work, is determined by individual characteristics [1, 6]. In the scientific literature, the determinants of objective and subjective readiness of athletes to participate in sports competitions were considered by G.D. Babushkin, V.N. Smolentseva et al. [5]. Identification of the individual characteristics of university students who, in the process of physical culture and sports activities, solve the problems of promoting health and improving their physique, rather than achieving sports

excellence, will make it possible to competently select the appropriate competitive forms of a group or individual orientation, helping to achieve high rates of involvement in mass physical culture and sports events involving element of competition.

Objective of the study was to study the individual typological and socio-psychological characteristics of university students with different levels of subjective readiness to participate in sports competitions.

Methods and structure of the study. The following methods were used: questionnaire by K. Thomas - R. Kilmann "Strategy of Behavior in a Conflict Situation" (K. Thomas, 1974); questionnaire "Attitude towards competitive physical culture and sports activities" [3]; test questionnaire "The need to achieve a goal. Scale for assessing the need to achieve success" (Yu.M. Orlov, 1978); G. Eysenck's personality questionnaire for the study of individual psychological personality traits

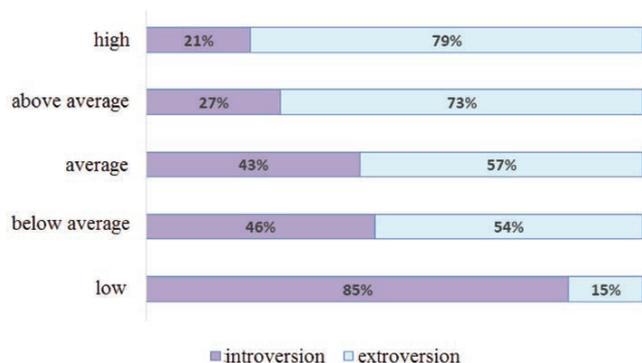


(G. Eysenck, 1963). Standard tests were used to assess physical fitness. Mathematical processing of the results was carried out by calculating the arithmetic mean and its error, the reliability of differences using the Student's t-test between independent samples, and using the approximation method.

The study involved 356 students (142 boys, 214 girls) of 1–3 years of Nizhnevartovsk State University. All participants provided consent to conduct diagnostics and process personal data. The level of subjective readiness to participate in sports competitions was determined according to the results of the questionnaire "Attitude towards competitive physical culture and sports activities", namely, according to the quantitative indicator of the activity component, characterizing the degree of readiness to become a participant in a sports competition and get involved in competition: 0-3 points - low, 4-7 points – below average, 8-11 – average, 12-15 – above average, 16-18 points – high.

Results of the study and discussion. A study of the level of subjective readiness to participate in sports competitions of study participants showed a high level in 8%, above average in 22%, average in 34%, below average in 27%, low in 9% of boys and girls. 100% of students with a high level of subjective readiness to participate in competitions have a history of sports experience, 84% of boys and girls whose level corresponds to above average, 73% to average, 44% to below average and 12% to low. The results allow us to state a greater degree of readiness to become participants in competitive events among those students who have experience in organized sports under the guidance of a coach.

The features of the nervous system that appear during the study of temperament are the most stable individual-typological characteristics of a person, which cannot be significantly changed in the process of preparing for activity, but they must be taken into account. The study of individual typological characteristics of students showed that an individual's subjective readiness to participate in competitions correlates with indicators of extraversion / introversion (see figure). A greater number of extroverts is observed in the group of students with a high and above average level of readiness to get involved in sports competition (79% and 73%, respectively); the smallest number is observed in students with a low level (15%).



The ratio of extroverts/introverts with different levels of subjective readiness to participate in competitions (in%)

Table 1 shows that as the level of expression of readiness to participate in sports competitions increases, a larger number of students with a dominant choleric type of temperament are found (from 3.7% to 47.4%) and a decrease in the number of subjects with a dominant melancholic type of temperament (from 66.7% to 0%). Among students with predominant sanguine and phlegmatic types of temperament, such tendencies were not identified.

Knowledge of the prevailing strategies of student behavior in interaction allows us to select the most optimal models for organizing competition - individual or team, competition with oneself or with others. The dominant behavioral strategies in interpersonal interaction among students with different levels of subjective readiness to participate in competitions are presented in Table. 2.

Constructive behavior strategies are observed in individuals with an average and above average level of readiness, as well as in young men with a high level. Among students with a low level of readiness to engage in competition under competitive conditions, a "passive-adaptive" type of behavior in interpersonal interaction predominates, characterized by inertia in one's own actions and the intention to make concessions to the opponent in order to prevent confrontation. The girls who were ready to become competition participants demonstrated the absence of the predominance of any behavioral strategy in interpersonal interaction. At the same time, among students there is a relationship between the quantitative indicators of "competition" and "avoidance" and the level of readiness for practical activities related to participation in sports events.

The study of the need to achieve success showed the absence of group average differences among stu-

Table 1. Correlation of types of temperaments among students with different levels of subjective readiness to participate in competitions (%)

Readiness level	Types of temperaments			
	Choleric	Sanguine	Phlegmatic	Melancholic
Low	3,7	11,1	18,5	66,7
Below the average	14,3	21,4	25,0	39,3
Average	23,5	20,0	35,3	21,2
Above average	36,7	24,5	30,6	8,2
High	47,4	26,3	26,3	0



Table 2. Strategies of behavior in interpersonal interaction of students with different levels of subjective readiness to participate in competitions ($M \pm m$)

Behavior strategy	Readiness level				
	High	Above average	Average	Below the average	Low
Boys					
	(n=14)	(n=26)	(n=50)	(n=42)	(n=10)
Competition/rivalry	5,8±0,4	4,3±0,5	4,2±0,3	2,8±0,4	2,1±0,7
	P _{1-2,1-3,1-4,1-5,2-4,2-5,3-4,3-5} < 0,05; P _{2-3,4-5} – no				
Cooperation	6,8±0,4	6,9±0,4	6,3±0,2	6,3±0,2	5,9±0,4
	P _{1-2,1-3,1-4,1-5,2-3,2-4,2-5,3-4,3-5,4-5} – no				
Compromise	7,8±0,5	7,6±0,3	7,5±0,3	7,6±0,3	6,7±0,4
	P _{1-2,1-3,1-4,1-5,2-3,2-4,2-5,3-4,3-5,4-5} – no				
Avoidance	4,1±0,2	5,6±0,3	5,9±0,3	7,3±0,3	9,2±1,1
	P _{1-2,1-3,1-4,1-5,2-4,2-5,3-4,3-5,4-5} < 0,05; P ₂₋₃ – no				
Device	6,1±0,7	5,9±0,3	6,0±0,3	5,9±0,3	7,4±0,8
	P _{1-2,1-3,1-4,1-5,2-3,2-4,2-5,3-4,3-5,4-5} – no				
Girls					
	(n=13)	(n=53)	(n=70)	(n=54)	(n=24)
Competition/rivalry	6,3±0,7	4,3±0,3	3,7±0,3	3,5±0,4	2,7±0,4
	P _{1-2,1-3,1-4,1-5,2-5,3-5} < 0,05; P _{2-3,2-4,3-4,4-5} – no				
Cooperation	5,7±0,5	6,5±0,3	6,6±0,2	7,0±0,3	6,5±0,4
	P ₁₋₄ < 0,05; P _{1-2,1-3,1-5,2-3,2-4,2-5,3-4,3-5,4-5} – no				
Compromise	7,6±0,5	7,8±0,3	7,9±0,3	7,9±0,3	7,3±0,4
	P _{1-2,1-3,1-4,1-5,2-3,2-4,2-5,3-4,3-5,4-5} – no				
Avoidance	4,8±0,4	5,8±0,2	6,2±0,3	6,2±0,3	8,5±0,5
	P _{1-2,1-3,1-4,1-5,2-5,3-5,4-5} < 0,05; P _{2-3,2-4,3-4} – no				
Device	6,2±0,5	6,1±0,3	6,3±0,3	6,2±0,3	5,7±0,6
	P _{1-2,1-3,1-4,1-5,2-3,2-4,2-5,3-4,3-5,4-5} – no				

dents with different levels of subjective readiness to participate in sports competitions.

Testing of motor abilities revealed a linear relationship between the results of tests requiring the manifestation of volitional efforts (strength endurance) and the level of subjective readiness to participate in sports competitions in both boys and girls. Using the approximation method, determination coefficients were obtained, stating a satisfactory relationship between the level of readiness and the results of the tests “Bending-extension of arms in a lying position” and “Raising the body from a lying position in 1 minute” (respectively $R^2 = 0.93$ and $R^2 = 0,92$ for girls and $R^2=0.95$ and $R^2=0.80$ for boys). Students who are ready to take part in competitions demonstrate the mobilization of mental and physical capabilities in achieving the best results in their activities. In the test tests “Standing long jump”, “Jumping rope in 1 minute”, “Bending forward from a position sitting on the floor”, “Shuttle run 3x10 m” no such dependence was found.

Conclusions. The study showed that university students with experience in sports, extroverts with a dominant choleric type of temperament, demonstrating a behavior strategy focused on reciprocity, demonstrate their readiness to take part in a sports competition. They also have higher results in motor tests that require the manifestation of volitional efforts.

Students with a low level of readiness to participate in traditional forms of competitive sports competitions are distinguished by a pronounced melancholic type of temperament and a passive-adaptive type of behavior in interpersonal interaction.

The results obtained state the need to search and scientifically substantiate new competitive practices with various models of organizing competition that satisfy the individual characteristics of university students, and their implementation in educational and extracurricular forms of physical education.

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