

## РОЛЬ ТУРИЗМА В АСПЕКТЕ ГАРМОНИЧНОГО РАЗВИТИЯ ЛИЧНОСТИ СТУДЕНТА

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**Аннотация:** в настоящее время широко обсуждаются проблемы оптимизации двигательной активности студентов, создания оптимального баланса между умственной и физической деятельностью молодежи, укрепления межпредметных связей, повышения интереса студентов к обучению и улучшению коммуникации между студентами. В отличие от большинства вузов России, согласно учебному плану по дисциплине «Физическая культура», пешеходный туризм является обязательным контрольным нормативом для студентов факультета среднего профессионального образования Санкт-Петербургского государственного университета аэрокосмического приборостроения. Каждый загородный пешеходный поход на 12-20 км включает в себя соревнования по спортивно-му ориентированию, спортивные игры, обучение навыкам выживания в лесу, посещение памятников природы, истории и культуры, лекции по истории, литературе, географии, экологии.

Молодые люди после участия в походах показали статистически значимые результаты по уровню физических качеств выносливости, по уровню развития функциональных возможностей организма и сплоченности коллектива (87% против 64%). Они стали менее агрессивными, раздражительными и застенчивыми, менее подверженными депрессиям и более открытыми. 64% респондентов указали, что походы под руководством учителя являются трамплином для самостоятельной туристической деятельности студентов. 79% молодых людей считают, что совместное времяпрепровождение помогает им лучше понять друг друга. 58 % респондентов считают, что получили реальные практические знания о действиях в сложных ситуациях.

**Ключевые слова:** походы, физическая культура, тест ИФП, личностные качества, тимбилдинг.

## THE ROLE OF HIKING IN THE ASPECT OF HARMONIOUS DEVELOPMENT STUDENT'S PERSONALITY

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**Abstract.** Nowadays there are widely discussed the problems of optimization of physical activity of students, creating an optimal balance between mental and activity of young people, to strengthen interdisciplinary connections, increase student's interest in education and improving communication between students. Unlike the majority of universities of Russia, according to the curriculum of physical culture, hiking is the obligatory control standard for students of faculty of secondary professional education of St. Petersburg State University of Aerospace Instrumentation. Each walking tour includes 12-20 km hiking, orienteering competitions, sports games, learning survival skills in the forest, visiting natural, historical and cultural monuments, lectures on history, literature, geography, ecology.

Young people after taking part in hiking have shown statistically significant results in the level of physical quality of endurance, in the level of development of the functional capabilities of the body and team cohesion (87% against 64%). They became less aggressive, irritable and shy, less susceptible to depression and more open. 64% of respondents indicated that hiking under the teacher's guidance, are a springboard for students' independent tourism activities. 79% of young people trusted that spending time together helped them to understand each other better. 58 % of respondents believe that they received real practical knowledge of action in difficult situations.

**Keywords:** hiking, physical culture, FPI test, personality traits, teambuilding.

The problem in the socialization of modern students has become obvious, when the emergence of electronic devices of communication and social networks, on the one hand, significantly expand their circle of communication and make it as accessible as possible, on

the other hand, young people experience difficulties in direct live communication with each other, often do not understand their colleagues, within the educational team to keep more separate, each for himself. Every year it becomes more and more difficult to attract students to participate in sports competitions for the honor of their group, faculty and university. The sedentary way of life, which is torn off from collective, limits possibilities of the young man in self-realization and real-life communication. Besides, the predominance of an individual approach over a collective one indirectly affects the quality of education in all.

In addition, the universal computerization and automation, increase in volumes of academic load, limits the degree of physical activity of students in general. The increase of living standards and expansion of a network of entertainments leads young people's preferences to spend free time in fashionable clubs and fitness centers, and to have a rest at sunny resorts. Hiking, in it's classical understanding as physical and applied training, expansion of an outlook and spiritual enrichment, a learning tool of beauty of the nature, do not enjoy popularity among youth. An unprepared person, finding themselves alone in a forest belt, can easily get lost and often does not know how to behave in the event of damage or injury.

Most of modern students, spending considerable time sitting in front of PC screens and using services of transport for daily movement, literally aren't able to walk correctly. Such people have violations of a bearing, the biomechanical structure of a step changed, there is a hypodynamia that, as a rule, leads to various pathological changes in the organism. As a result, the person loses contact with nature, which ensures the necessary flow of spiritual and physical strength that impoverishes an essence of the person as a biological being.

**Introduction.** According to the curriculum for physical culture, hiking is the obligatory control standard for students of faculty of secondary professional education of St. Petersburg State University of Aerospace Instrumentation. Hiking is allocated 32 hours in each term of the first and second academic year. Hiking are carried out with students in the autumn-spring period on the territory of the Karelian Isthmus.

Each tour includes 12-20 km hiking, orienteering competitions, sports games, learning survival skills in the forest, visiting natural, historical and cultural monuments of the Karelian isthmus, lectures on history, literature, geography, ecology. The main tasks of walking trips are the following:

- Health improving & sport component: increase the level of organism functionality, maintaining health at a good level, development of the main physical qualities, ability to perform the specified qualifying standards of orienteering, teamwork skills.
- Educational component: acquisition of elementary camping skills (laying of a marching backpack, tent installation, fire ignition, an ability to overcome obstacles of various level of complexity with sharply changing relief, knowledge of organization features and diet of marching food, protection against the stinging insects), an ability to correctly select the strong and convenient sportswear and footwear, opportunity to provide the first aid, mastering skills of fire safety and fire extinguishing while staying in the wood, an ability to act independently in an emergency situation.
- Cultural and ecological education component: the study of history, geography, flora and fauna of the Karelian isthmus, visiting historical & memorable places, which are the object of cultural heritage, acquaintance with main regulating documents and acts in the sphere of environmental protection.
- Moral & emotional component: education of personal qualities of mutual understanding, mutual assistance, organization, discipline and duty, development of personal organizing abilities, improvement of mood and expansion of an outlook.

In light of the ongoing discussions about the feasibility of hiking instead of part conventional training in physical culture, we decided to conduct a study of the impact of hiking on the physical and mental state of the students.

**Participants.** Two educational groups of faculty of secondary professional education of Saint-Petersburg State University of Aerospace Instrumentation majoring in “computer systems and complexes” took part in experiment. The experimental group consisted of 25 students, 19 boys and 6 girls (age  $15,61 \pm 0,59$  years, height  $173,26 \pm 3,97$  m and body mass  $68,08 \pm 8,62$  kg), the control group consisted of 22 students, 18 boys and 4 girls (age  $15,55 \pm 0,64$  years, height  $173,91 \pm 4,32$  m and body mass  $69,22 \pm 8,02$  kg).

**Methods.** Pedagogical experiment lasted during one academic year. The students of control group have trained by traditional methods of physical culture with training interval 2 times per week in accordance with the curriculum from September to June. The students of experimental group have 4 hiking in the course of the experiment (4 each term, 2 hikes in September, October, May and June). Each hiking tour took place on Sunday instead of two trainings of physical culture and consisted of:

- moderate intensity walking – 12 km (September), 15 km (October), 18 km (May) and 20 km (June);
- competitions on sports orientation at a distance of 3-5 km;
- the competition on the obstacle course and the basics of tourism;
- football and volleyball matches;
- acquaintance with objects of cultural and natural heritage of the Karelian isthmus;
- lectures on the history, geography, literature, biology and the environment.

The control testing have conducted at the beginning (September) and end of the experiment (June) for the comparative analysis of:

- 1) the level of general physical preparedness of students (development of physical qualities of speed, strength and endurance) - results of 100 meters sprint, 3000 meters running, long jump from the spot, forward bend and pull-ups;
- 2) the level of functional development of the body – breath-holding tests, a Roufrier test, lung capacity test, Romberg test;
- 3) the level of team unity on the basis of questionnaire survey;
- 4) the level of personality traits of students by multifactorial personality questionnaire of FPI.

A comparative analysis of the experimental results was carried out using the methods of mathematical statistics.

### Discussion.

1. The results of general physical preparedness of students are shown in table 1. Due to the small sample among girls, only the average results among boys were taken into account in this section. The students of the control group in the end of experiment have shown better average results in 100 m sprint and in forward bend. The students of the experimental group have shown better results in 3000 m, long jump from spot and pull-ups tests than students of the control group, but the differences are statistically significant ( $P < 0,05$ ) only in 3000 meters results. This suggests that the hiking first of all have a positive impact on the development of students’ physical quality of endurance.

Table 1.

The comparison of the results of general physical preparedness of male students during the experiment.

Period	Beginning of experiment (September)					End of Experiment (June)				
	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P
100 m (s)	14,51	0,72	14,62	0,70	>0,05	14,37	0,65	14,30	0,58	>0,05
3000 m (s)	14,00	1,16	14,11	1,06	>0,05	13,38	0,98	14,03	1,05	<0,05

Long jump from spot (m)	2,24	0,19	2,27	0,20	>0.05	2,35	0,16	2,33	0,17	>0.05
Forward bend (cm)	5,11	3,68	4,67	4,39	>0.05	5,70	3,09	6,47	3,04	>0.05
Pull - ups	10,85	4,07	11,15	4,49	>0.05	12,60	3,95	12,45	4,60	>0.05

2. The results of average level of students' functional development are shown in table 2.

Table 2  
The comparison of average level of students' functional development during the experiment.

Period	Beginning of experiment (September)					End of Experiment (June)				
	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P
Shtange test (s)	50,87	3,33	52,44	3,38	>0.05	59,28	2,79	53,50	3,82	<0.05
Genchi test (s)	35,00	3,21	33,83	3,49	>0.05	38,40	2,38	37,68	2,78	>0.05
Rouffier test	11,04	1,05	11,19	1,11	>0.05	8,01	1,26	10,41	1,17	<0.05
Lung capacity test (cm <sup>3</sup> )* boys only	3,87	0,11	4,07	0,12	>0.05	4,35	0,12	4,26	0,12	>0.05
Romberg test (%)	64	-	59	-	>0.05	92	-	68	-	<0.05

The statistically significant differences ( $P < 0.05$ ) were found between testable students of experimental and control groups in the results of Shtange, Ruffier and Romberg test in the end of experiment. This indicates that the young people participated in the hiking had better developed respiratory and cardiovascular systems, as well as significantly improved static coordination.

3. The results of the level of team cohesion, made with the help of questionnaires of students, are shown in table 3. The calculation was carried out on a 10 scale.

Table 3  
The comparison of the results of the average level of team cohesion during the experiment.

Period	Beginning of experiment (September)					End of Experiment (June)				
	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P
The average level of team cohesion	4,64	1,60	5,04	2,05	>0.05	8,74	0,92	6,40	1,39	<0.05

The students of experimental group have shown statistically significant differences in the average level of team unity during the experiment ( $P < 0.05$ ). 21 of 25 respondents of the experimental group assessed the level of team unity on 8 or more points at the end of the experiment.

4. The results of the level of personality traits of students by multifactorial personality questionnaire of FPI test are shown in table 4.

Table 4  
The results of the level of personality traits of students, made by multifactorial personality questionnaire of FPI test.

Variables	Beginning of experiment					End of experiment				
	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P	X exp.	$\pm\sigma$	X cont.	$\pm\sigma$	P
Aggressiveness	4,56	1,53	4,64	1,57	>0.05	3,52	1,94	4,56	1,53	<0.05
Depression	5,92	2,12	5,36	2,29	>0.05	3,96	1,46	4,28	1,28	>0.05

Shyness	6,16	1,99	6,40	2,12	>0.05	4,56	1,42	5,36	1,29	<0.05
Neuroticism	6,76	1,05	6,44	1,96	>0.05	4,48	2,29	6,56	1,26	<0.05
Sociability	5,48	2,10	5,64	2,18	>0.05	6,96	1,74	7,16	2,01	>0.05
Openness	5,36	2,25	5,76	2,42	>0.05	7,52	1,56	5,96	1,97	<0.05
Irritability	5,68	2,15	6,04	1,97	>0.05	4,12	2,09	5,24	1,51	<0.05
Spontaneity	3,72	2,44	3,52	2,35	>0.05	3,36	2,64	2,48	1,83	>0.05
Balance	5,96	2,13	5,08	2,47	>0.05	6,04	2,07	6,24	1,90	>0.05

The results of the questionnaire have shown that students of experimental group in comparison with students of the control group became less aggressive ( $P<0.05$ ), less irritable ( $P<0.05$ ) and less shy ( $P<0.05$ ) in the end of experiment. The students of experimental group during the experiment were significantly less anxious ( $P<0.05$ ) and more open ( $P<0.05$ ). The students of experimental group during the experiment appeared less susceptible to depression, but these results were not statistically significant ( $P>0.05$ ). In such indicators as the spontaneity, balance and sociability was not observed any significant trends.

**Conclusion.** The level of physical preparedness of students took part in hiking at the end of the experiment was approximately at the same level as that of the students who have trained only at sports facilities. Nevertheless, participation in hiking and orienteering competitions helped young people to increase significantly the level of endurance of the body, improve the functional capabilities of the cardiovascular and respiratory systems. And the training and improvement of special tourist skills contributed to the improvement of students' coordination abilities.

After a series of hikes, all students noted the high level of team cohesion, which positively affects favorable social and psychological climate in the collective. Educational groups become more united, that is shown both at sports competitions and in study, aggression level decreases, mutual understanding with teacher improves. Students become less shy, more relaxed and confident.

64% of respondents indicated that hiking under the teacher's guidance, are a springboard for students' independent tourism activities. The young people begin to show an interest in a joint search of new holiday destinations, a deeper study of the history and nature of their native land. 79% of young people trusted that spending time together helped them to understand each other better. 58 % of respondents believe that they received real practical knowledge of action in difficult situations.

To sum up the analysis above, we can draw a conclusion that thus a variety of physical education, holding trainings outside in nature in combination with educational component, the inclusion of hiking trips as a compulsory section of the curriculum for physical education in universities should have a positive impact on harmonious development of the student's potential. We believe that our experience of including hiking in the curriculum of physical education should be used in other educational organizations.

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УДК 796:159.937.53

## ВОСПРИЯТИЕ ВРЕМЕНИ В СПОРТЕ

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**Аннотация.** В данном исследовании рассматривается влияние восприятия временного пространства на основные показатели спортсмена во время соревнований – ощущение темпа и чувство ритма. Проведен анализ основных показателей восприятия времени в «танцевальных» видах спорта, а также беговых видах спорта. Определены проблемные вопросы, возникающие в процессе исследования восприятия времени в спортивной деятельности.

**Ключевые слова:** восприятие времени, спорт, спортивная деятельность, чувство ритма, чувство темпа.

## PERCEPTION OF TIME IN SPORTS

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**Abstract.** This study examines the influence of the perception of time space on the main indicators of an athlete during a competition – a sense of pace and a sense of rhythm. The analysis of the main indicators of time perception in "dance" sports, as well as running sports, is carried out. The problematic issues arising in the process of studying the perception of time in sports activities are identified.

**Keywords:** perception of time, sport, sports activity, sense of rhythm, sense of pace.

Профессиональная деятельность спортсмена неразрывно связана с восприятием времени, а также его оценкой. Восприятие времени является необходимым элементом при оценке деятельности самого спортсмена, так как позволяет сформировать результат тренировки или спортивного соревнования. Иными словами, при четком восприятии времени спортсмен может усилить нагрузку или держать ее в прежнем темпе.

Восприятие времени играет важнейшую роль не только в спортивной деятельности, но и в повседневной жизни. К примеру, как известно, время проходит в медленном