

УДК 796 (08)

## Student Motivation to Autonomous Sports Activity and Physical Perfection

Nataliya A. Sannikova\*,  
Olga G. Matonina, Evgeny A. Nikolaev,  
Viktoria V. Fedorova and Natalia V. Mezentseva  
Siberian Federal University  
79 Svobodny, Krasnoyarsk, 660041 Russia <sup>1</sup>

Received 2.09.2011, received in revised form 9.09.2011, accepted 16.09.2011

---

*Human body is a unique complex self-regulating, self-developing biological system, which has permanent interaction with environment, as well as power to self-education, perception, storage and communication of information. Precondition of somatic and vegetative functioning of a human organism in all the phases of its development is its muscular activity. Students' attitude to physical education and sports is the issue of immediate interest of modern society. Numerous recent researches (Agadzhanyan et.al., 1997; Vishnevskiy et.al., 2000; Stepanova, 2003) prove that physical culture and sports activities have not turned into urgent student personal necessity yet.*

*The article raises the question of student motivation to autonomous sports activity. The research reveals a number of findings: firstly, the incentives for autonomous sports activity; secondly, types of the male- and the female-students' attitudes to physical exercises; thirdly, their interest to different kinds of sport; fourthly, influences on the forming of sports interests; then, obstacles to regular sports activity; and finally, differences in males' and females' motivation to bodily exercises.*

*The results we report here were obtained from traditional methods: scientific-methodological literature analysis, questionnaire survey, interviewing. Sample groups consisted of 145 male-students and 155 female-students.*

*Keywords: motivation, physical exercises, students.*

---

Student years make one of the crucial periods in biological, psychical and social human development. A number of factors influence the young adults' health, including growing intensity and stresses of contemporary life, fundamental change of life-sustaining activity, different lifestyle, hypodynamia, and somatic diseases (Bogatyrev, 2000)

The necessity for implacable development and scientific rationale of new technologies in

health and fitness sphere is caused by incidence rate among the population, which includes students. Modern sedentary lifestyle has an enormous effect on youth physical activity; it leads to decrease of physical growth and development. Conversely, encouragement of students to autonomous sports activity and systematic exercises contributes to both physical and professional self-enhancement. One of the major components of the general structure of student physical culture is so called

---

\* Corresponding author E-mail address: sannikova-nata@yandex.ru

<sup>1</sup> © Siberian Federal University. All rights reserved

“improvement of personal abilities, development of student self-education and self-study skills” (Susoyev, 2003).

The scientific-methodological literature analysis reveals that men have always been generally more active in physical activity than women. The sociological research conducted by Vinogradov, P.A., et.al., (Vinogradov et.al., 1977) indicates that 65.2 percent of men do morning exercises while women make only 34.3 percent. Similar data were received by Mansurov, I.I. (Mansurov, 1973): 50.7 percent of men and 37.9 percent of women have regular physical activity in the morning. According to his survey, 8.1 percent of men and 2.9 percent of women practise in sports clubs, and 10.8 and 2.1 percent of men and women accordingly take part in competitions.

On the 14<sup>th</sup> of October, 2008, in the city of Odintsovo (Moscow oblast), Dmitry Medvedev, the President of the Russian Federation headed the joint session of the Presidium of the State Council and the Council for Physical Culture and Sport under the President of Russia, where he read out aloud some actual facts and figures on exercisers and sportsmen: “Only 15 percent of the population go in for physical culture and sports. In other words, 85 percent, that is more than two thirds, are not involved into sports activity at all. This is the evidence of lack of accessible opportunities for physical activity rather than indifference to sports.”

Such evidence may be derived from a number of reasons: lack of facilities, insufficiency of public relations on dynamic healthy lifestyle, high cost of services in the sphere of physical culture and sports. The evidence, taken together in different regions of the Russian Federation, suggests significant growth of number of students suffering from health disorders, insufficient physical development and unfitness of the youth for the professional activity (Vilensky et.al., 1996).

The main objective of student study in the sphere of physical culture is to be forming of needs in “health-building” (Vorontsov, 1990). Students’ exposure to autonomous sports activity, as well as ingraining of the habit of systematic exercises lead to their physical and professional perfection.

One of the major components of the state economic policy is advancement of physical culture and sport. In fact, opportunities offered by sports committees and organisations are not always taken properly. One of the foremost objectives today is to stimulate steady interest in physical culture and sports among the young adults. The fruitful ground for gaining the objective is creating stimulating pedagogical conditions.

The results obtained by the research centres indicate that only 16 percent of the first-year students make so called first health group, i.e. students without physical or somatic abnormalities (Kovalenko et.al., 2000). By the last year of study, the first health group grows downwards, and the second, or “special” health group grows upwards correspondingly.

One of the major structural elements of students’ physical activity is their intrinsic motivation. For that reason, any educational institution should concentrate on forming student motivation to regular exercises. In this connection, students’ awareness of their physical development and need for self-improvement plays a significant role.

Autonomous learning promotes better study results, considerably increases time for sports activity, and accelerates the process of physical skills development. Besides, it could be considered as one of the tools for implementing physical culture and sport into students’ everyday life. Training classes, together with well-organised autonomous physical learning, provide steadiness and effectiveness of physical education.

Daily physical activity is aimed at health promotion, rise of mental and physical working capacity, improvement of study conditions and everyday life. Here it is reasonable to emphasize the importance of role of sports activity in students' life, the significance of intrinsic motivation to regular exercises and dynamic healthy lifestyle.

With regard to the fact that a lot of research on student motivation is carried out (Konik, et.al., Konopleva et.al., etc.), the problem is not entirely solved: in terms of gender differentiation the issue is not sufficiently highlighted. Considering that reproductive health addresses the reproductive processes and functions of young women, their physical activity will contribute to corrective measures in the event of deficiencies (Chodorow, 1989, Drozdovski, 1999).

It is reasonable to mention that physical exercises and sports improve reproductive functions, have general tonic effect, activate blood circulation, and minimize small pelvis congestion (Shushunova, 2000., Droege, 1982). It seems logical to assume that physical activity is one of the most highly effective preventative measures for reproductive health. Physical exercises serve to raise students' interest to the problem of reproductive health, their motivation to sport and physical activity, either inside or outside the university curriculum (Chodorow, 1989., Drozdovski, 1999).

In consequence, whereas health and study are interrelated and interdependent, it is important to encourage interest to sport, to support motivational attitude to physical activity in terms of value, need to regularly exercise and self-improve (Khramogina et. al., 2007).

Student motivation is not homogeneous; it depends on a number of factors, including age-related peculiarities, personal characteristics, and gender. The results of our research establish a clear pattern: the first-year students treat

physical culture just as a university discipline, while the seniors value sport in a different way: they appreciate its moral and emotional sides; they demonstrate high motivation to exercises. The word 'sport' itself is estimated differently: girl students are aimed at building slender figures and proper body postures, whereas boy students' goals are to reach the best results. They tend to model themselves on the distinguished sportsmen from the elite sport.

Our study reveals several lines of student interest to sports: 5 percent of students read sports papers, 46 percent watch sports channels, and 24 percent attend sports events, and 25 percent are not interested in sports at all.

During our research, basing on the conceptual foundation of Balamutova, N.M., Sheiko, L.V., and Oleynikov I.P., (Balamutova et.al., 2005) we distinguished three sets of motives, relevant for the study of motivation to student physical activity: motives for health-building, motives for development of motional and strong-willed characteristics and, finally, emotional motives.

### **Subjects and methods**

The findings of contemporary studies establish a clear pattern: nowadays forming of youth needs of physical self-perfection is on the front burner, this forming is to be a positive long-term outcome of all the staff efforts on student physical development. The motivational component takes the leading position in every student personal framework of physical development.

*Our research is aimed at specifying of motivation of male- and female-students to autonomous sport activity.*

*Methods and research management.* Our research reveals several lines of evidence: motives of autonomous sport activity; forms of active attitudes of boys and girls to physical exercises; their interest to different kinds of

sport; influences of forming physical and sports interests; obstacles for regular physical activity and going in for sports; differences in motives to exercises among male- and female-students. Scientific-methodological literature analysis, questionnaire surveys and interviewing were chosen as research methods. The inventory, based on the conceptual foundation of Balamutova, N.M., Sheiko, L.V., and Oleynikov I.P., was used for evaluation of motives for health-building, motives for development of motional and strong-willed characteristics and emotional motives. Student's t-test was used for statistical analysis.

Sample groups consisted of 145 male-students and 155 female-students, overall sample group under our consideration consisted of 300 test-persons.

### Research findings

The findings of the study of students' motives for health-building, motives for development of motional and strong-willed characteristics and emotional motives are shown in Table 1.

The findings show that the motives to health-strengthening and sustentation (the set of motives for health-building) play a crucial role (male-students – 58 percent; female-students –

46 percent); and male-students, compared with female-students, credibly ( $p < 0,05$ ) consider physical training as an important factor of health-strengthening. The comparison of the motive “Good well-being after training” does not demonstrate big difference in male-students' (53 percent) and female-students' (51 percent) assessment.

In the set of motives for development of motional and strong-willed characteristics two motives carry weight, that is development of strength and development of endurance. The comparison shows that the motives of male students credibly ( $p < 0,05$ ) differ from the motives of female students. In the student personal framework of physical development, larger specific weight is carried by the motive “Development of endurance” (male-students – 66 percent; female-students – 56 percent). Male-students show larger interest to development of motional and strong-willed characteristics; physical exercises are less attractive for female-students.

The table also shows that emotional motives (“Enjoyment in training”, “Being in a good temper before and after training”) are not of great significance for the motivation to physical culture. Only one third of the

Table 1. Motivation to male- and female-students to physical activity (in percentage terms to the number of respondents)

Motives	Male-students	Female-students	t-distribution	p-level
Conation to health-strengthening and sustentation	58	46	2,10	$p < 0,05$
Good well-being after training	53	51	0,35	inconsiderable
Development of strength	86	77	2,03	$p < 0,05$
Development of endurance	66	56	1,79	inconsiderable
Gaining momentum	49	41	1,40	inconsiderable
Enjoyment in training	39	35	0,72	inconsiderable
Being in a good temper before and after training	44	36	1,42	inconsiderable

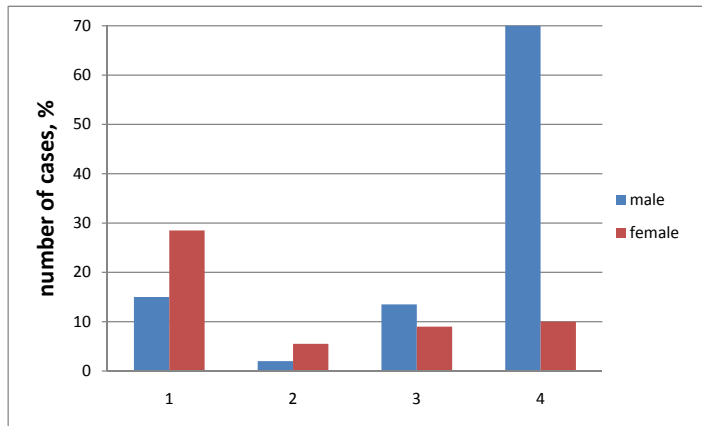


Fig. 1. Attitudes of male- and female-students to different types of physical activity (1 – morning exercises; 2 – fitness; 3 – sports clubs; 4 – autonomous activity)

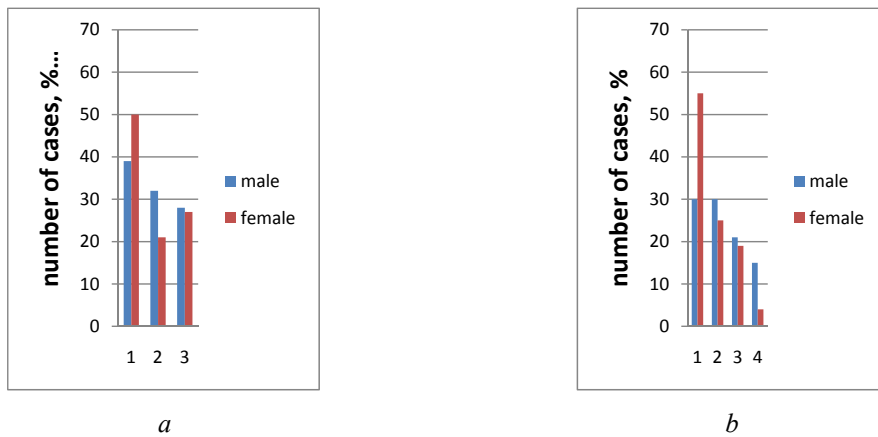


Fig. 2. Frequency of physical activity (a) and length of physical activity (b): (a) frequency of physical activity (1- two times a week; 2 – three-four times a week; 3 – more than four times a week); (b) length of physical activity (1 – up to two hours a week; 2 – two-five hours a week; 3 – five-eight hours a week; 4 – more than eight hours a week)

respondents pointed to the positive value of the emotional motives.

According to our findings, only 41,8 percent of male-students and 20,4 percent of female-students from 300 respondents did physical exercises and sports before they entered the university. The girls did morning exercises more often; they also were into fitness and dances, whereas the boys went in for sports autonomously or in sports clubs and spent more time on sport activity.

Accordingly, more male- (45,8 percent) than female-students (20,6 percent) had sports classification standards.

There is considerable difference in showing interest to various kinds of sport among men and women. The study provided by Ripa, M.D. (Ripa, M.D., 1971b) indicated that men were mostly interested in volley-ball, basketball, football and hockey, while women were involved into figure-skating and gymnastics. At that time, both groups shared high interest to track-and-field athletics

and swimming. At the same time, our study shows sharply growing interest to aerobics and its varieties (step, slide, funk), and callanetics among women. At the same time, they are becoming more involved into such sports as power-lifting, arm-wrestling, body-building and all the types of martial arts.

Ripa, M.D. (Ripa, M.D., 1971b) also studied social factors of forming men's and women's sports interests. Women were mostly attracted by radio and television sports programmes, sports papers and magazines, advertising, so called 'Universities of Health'; whereas movies and documentaries about sport and sportsmen, books about outstanding athletes, well-run physical education in educational institutions and the army, desire to become a champion or record-breaker, high results at school, and mass sport events were more weighable for men. Seen as a whole, our results suggest the following factors of forming men's and women's sports interests today: men are attracted by sports TV programmes and sustenance of physical form, women work hard for the sake of ideal figure.

In 1973, Mansurov, I.I. indicated the obstacles for regular physical culture and sport activities among grown-ups. Women referred to lack of interest, lack of free time, outdated customs and traditions. Men mostly mentioned external factors: no sports centres close at hand, no sports clubs on favourite kind of sport. Our results does not reveal any considerable gender-based differences in obstacles for regular physical activities; lack of spare time, financial inability and other hobbies are most widely-named.

### **Implications**

The research results demonstrate that male-students show larger interest to development of motional and strong-willed characteristics; whereas female-students are nor encouraged by these motives. Male-students, compared with

female-students, credibly ( $p < 0,05$ ) consider physical training as an important factor of health-strengthening.

The research findings also show that emotional motives such as enjoyment in training, or being in a good temper before and after training are not of great significance for the motivation to physical culture.

Significant gender-based differences influence choice of sports for autonomous training. Women show growing interest to aerobics, shaping and its varieties; men are involved into endurance sports and martial arts.

Our results indicate the following main factors of forming sports interests among the youth today: men are attracted by sports TV programmes and sustenance of physical form, women work hard for the sake of ideal figure.

The research does not reveal any considerable gender-based differences in obstacles for regular physical activities; lack of spare time, financial inability and other hobbies are most widely-named.

### **Conclusion**

The process of improvement of the system of physical education is based on the wide usage of the scientific achievements in the sphere of social, pedagogical studies and science. Recently, it has been sophisticated and determined by a number of factors, among which motivation to autonomous sports activity remains essential. It is vitally important to encourage the tendency of growth of student physical culture and sport, to raise the level of positive motivation to autonomous sports activity and systematic exercises which contributes to dynamic healthy lifestyle.

Efficiency of physical education will considerably grow if the level of positive motivation to systematic exercises develops. Today we set a goal of creating the base for student life-long needs of physical training. We

see purposefulness of further research in study of consistent patterns of motivation forming on the principles of psycho – pedagogical mechanisms of conscious perception of structural components of physical culture and dynamic lifestyle. The further research is aimed at solving the problem of motivation of student systematic autonomous sports activity.

### References

- N.A. Agadzhanian, V.P. Degtyarev, E.I. Rusanova, et. al., *Student Health*. – M., 1997. (In Russian)
- N.M. Balamutova, L.V. Sheiko, V.P. Oleinikov, “Research on Motivation and Efficiency of Women Health-Improving Swimming Training”, *Theory and Practice of Physical Culture*, 2005, №1. (In Russian)
- V.N. Belenov, *Forming of the Axiological Attitude of High School Students to Their Health Under Physical Education: Synopsis of thesis*, Samara, 2000. (In Russian)
- V.V. Belous, Kopan, T.V. “Role of Motivation and Encouragement in Forming the Structures of Integral Individuality”, *Voprosy Psichologii*, 1995, № 6. (In Russian)
- Y.V. Borisov,” Attitude to Physical Culture and Sport in the Village”, *Theory and Practice of Physical Culture*, 1972, № 7. (In Russian)
- A.A. Verbitskiy, T.A. Platonova, *Forming of Cognitive and Professional Motivation*, M., 1986. (In Russian)
- M.Y. Vilensky, “Physical Culture in the University Educational Field”, *Physical Culture: Education, Instruction, Training*, 1996, № 1. (In Russian)
- V.K. Vilyunas, *Psychological Mechanisms of Human Motivation*, M/: MSU, 1990. (In Russian)
- P.A. Vinogradov, V.I. Zholdak, L.N. Nifontova, “Morning Exercises in the Life of a Modern Person”, *Theory and Practice of Physical Culture*, 1977, № 6. (In Russian)
- P.A. Vinogradov, A.P. Dunashin, V.I. Zholdak, *Basis of Physical Culture and Healthy Lifestyle*, M.: Soviet Sport, 1996. (In Russian)
- Y.R. Vishnevskiy, V.T. Shapko, “Student of the 1990<sup>th</sup> – Socio-cultural Dynamics”, *Sociological Studies*, 2000, № 12. (In Russian)
- Y.N. Vorontsov, *Sensible Person’s Needs: Implication, Criteria, Ways of Forming*, Voronezh, 1990. (In Russian)
- Students’ Health. Collection of scientific papers*, Under the editorship of V.S. Bogaturov, Kirov: Vyatka State Pedagogical University, 2000. (In Russian)
- Z. Drozdovsky, “Sport Activity of Women in Poland”, *Theory and Practice of Physical Culture*, 1999, № 6. (In Russian)
- E.P. Ilyin, “From Physical Culture to the Culture of Health”, *Theory and Practice of Physical Culture*, 1994, № 7. (In Russian)
- T.G. Kovalenko, *Socio-biological Basis of Physical Culture and Sport*, Volgograd: VolSU, 2000. (In Russian)
- V.I. Kovalev, *Motives of Behaviours and Activities*, M., 1988. (In Russian)
- V.I. Kovalev, V.N. “Druzhinin, Motivational Sphere of a Person and Its Dynamics in the Process of Professional Development”, *Psychological Journal*, 1982, Vol. 3, № 6. (In Russian)

G.A. Konik, V.V. Temchenko, T.E. Usova, "University Physical Training as Means for Forming of Student Motivation to Healthy Lifestyle", *Physical Education of Students of Creative Specialties*, 2006, № 4. (In Russian)

E.N. Konopleva, "Forming of Motivation to Physical Culture among the Students of Non-Athletic Departments by Means of Lectures on the Theory and Practice of Physical Culture" *Physical Education of Students of Creative Specialties*, 2008, № 3. (In Russian)

E.N. Konopleva, "Motivational Techniques (based on Edwards's Inventory) and Readiness to Risk-Taking Among Russian Students", M.: State University Bulletin. Series 14. Psychology, 1997, № 2. (In Russian)

M.M. Lapkin, N.V. "Yakovleva, Motivation of Study and University Students' Academic Success", *Psychological Science*, 1996, Vol.17, № 4. (In Russian)

I.I. Mansurov, "Structure of Physical Culture and Sport in Karachay-Cherkessia" *Theory and Practice of Physical Culture*, 1973. (In Russian)

A. Maslow, *Motivation and Personality*, St. Petersburg, 1999. (In Russian)

S.G. Moskvitchev, *Problems of Motivation in Psychological Research*, Kiev, 1975. (In Russian)  
*Student Lifestyle and Health. Proceedings of the First Russian National Scientific Conference*, M., 1995. (In Russian)

Y.M. Orlov, *University Students' Motivational Factors of Study Efficiency: Synopsis of doctoral thesis*, M, 1984. (In Russian)

V.A. Pankov, "Physical Culture and Sport for Women's Dynamic Healthy Lifestyle", *Theory and Practice of Physical Culture*, 1973, №6. (In Russian)

R.A. Piloyan, *Motivation of Sport Activity*, M.: Physical Culture and Sport, 1984. (In Russian)

T.V. Popova, *Forming of Motivational Component of Psychological Self-Regulation of Learning Among the Students of Philological Faculty. Synopsis of thesis*, Kazan, 2002. (In Russian)

A.A. Rean, et.al., "On the System of Values and Motivation of the University Students", *Ananyev Readings: Scientific conference abstracts*. – St. Petersburg: 1999. (In Russian)

M.D. Ripa, "Some Social Factors of Forming Sports Interests", *Theory and Practice of Physical Culture*, 1971, №10. (In Russian)

G.B. Stepanova, "Reproduction Health and Student Lifestyle", *Proceedings of the Conference "Russian Society and Sociology in XXI Century: Social Challenges and Alternatives*, M.,: 2003. (In Russian)

V.V. Sysoev, *Forming of Needs of Physical Self-Improvement Among the Students of Non-Core Pedagogic Specialties*, Bryansk, 2003. (In Russian)

H. Heckhausen, *Psychology of Achievement Motivation*, St. Petersburg, 2001. (In Russian)

M.M. Khramogina, Yu.Yu. Grakholskaya, A.V. Kireeva, *Motivation to Physical Activity among First-Year Students of Different Times* (1987, 2007), Saratov State Agrarian University named after N.I.Vavilov, 2007. (In Russian)

V.I. Chirkov, "Interpersonal Relationships, Intrinsic Motivation and Self-regulation", *Voprosy Psichologii*, 1997, № 3. (In Russian)

A.V. Shaboltas, *Motives for Elite Sports Training Among Adolescents. Synopsis of thesis*, St. Petersburg, 1998. (In Russian)

M.S. Shushunova, *Alternative Gynecopathy Medical Treatment of Immature Girls*, M., 2000, (In Russian)



I.I. Scherbakov, "Influence of Socio- Demographic Status on Motivation to Physical Culture and Sports", *Theory and Practice of Physical Culture*, 1986, №4. (In Russian)

N.J. Chodorow, *Feminism and Psychoanalytic Theory*, – New Haven, CT: Yale University Press, 1989.

R.A. Droege, *Psychosocial Study of the Formation of the Middle Adult Life Structure in Women. Unpublished doctoral dissertation*, California School of Professional Psychology, Berkeley, 1982.

Z. Drozdovski, "Sports Activity of Women in Poland", *Theory and Practice of Physical Culture*, 1999, № 6.

## **Мотивация студентов к самостоятельной физкультурно-спортивной деятельности и физическому совершенству**

**Н.А. Санникова,  
О.Г. Матонина, Е.А. Николаев,  
В.В. Федорова, Н.В. Мезенцева**  
*Сибирский федеральный университет  
Россия 660041, Красноярск, Свободный, 79*

---

*Организм человека – единая, сложная, саморегулирующаяся и саморазвивающаяся биологическая система, находящаяся в постоянном взаимодействии с окружающей средой, имеющая способность к самообучению, восприятию, передаче и хранению информации. Мышечная деятельность является неперенным условием формирования двигательных и вегетативных функций организма человека на всех этапах его развития. Отношение студентов к физической культуре и спорту – одна из актуальных социально-педагогических проблем современного общества. Многочисленные исследования последних лет (Агаджанян и др., 1997; Вишневецкий и др., 2000; Богатырев, 2000; Степанова, 2003) свидетельствуют о том, что физкультурно-спортивная деятельность еще не стала для студентов потребностью, не превратилась в интерес личности.*

*В статье рассмотрены вопросы мотивации к самостоятельным занятиям физической культурой у современных студентов. В ходе нашего исследования были выявлены: мотивы самостоятельных занятий физической культурой и спортом; формы активного отношения юношей и девушек к занятиям физическими упражнениями; их интерес к различным видам спорта; факторы формирования физкультурных и спортивных интересов; причины, которые препятствуют регулярным занятиям физической культурой и спортом; различия в мотивах занятий физическими упражнениями юношей и девушек. Был использован ряд традиционных методов исследования: анализ научно-методической литературы, анкетирование, интервьюирование. Выборка юношей – студентов состояла из 145 чел., а девушек – студенток – 155 чел.*

*Ключевые слова: мотивация, физическая культура, студенты.*

---