

ABOUT SELF-STUDY OF PHYSICAL CULTURE DURING THE EXAMINATIONS AS A CRITERION OF STUDENTS' READINESS TO PROFESSIONAL ACTIVITIES

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Abstract

Purpose of the study: The relevance of the research is conditioned by the contradiction between the social and state need to form the positive attitude to healthy lifestyle (including extracurricular time) in student youth and the underestimation of the potential of students' self-study activities aimed at increasing of physical activity and development of readiness for physical culture in specified group of youth. The article is aimed at the study of the student's readiness for independent physical education during the examinations as a manifestation of independence in general, as well as at the study of the significance of independent physical education of students during the examinations in the process of future specialist formation.

Methodology: The leading approach to the study of this problem was the theory of the activity approach in the development of personality and independent activities of students which allowed to substantiate the place of readiness of university students for independent physical training during the examinations in the process of future specialist training.

Results: Of all the types of special readiness, the readiness of university students for independent physical training during examinations is of particular importance, the specificity of which is that this type of readiness contains features of types of readiness for professional activity, as well as readiness to act in problem situations, in which connection the readiness for independent physical training during the examinations is an indicator of the future specialist's readiness to problem professional situation.

Applications of this study: The results of the study allow specialists who study the quality of university graduates to use the assessment of the development of student's readiness for independent physical training during the examinations as an indicator of the future specialist's readiness to act in a problem situation.

Novelty/Originality of this study: The authors note that this problem cannot be solved by simply increasing the hours envisaged by the curriculum for independent work in the framework of the subject "Physical Education", i.e. increase in quantity. A qualitative change in the approach to independent work of students, an appropriate system of actions in her organization and planning are necessary to achieve the desired effect.

Keywords: *readiness, independence, physical culture, examinations.*

INTRODUCTION

As practice shows, the quality of life of a university graduate is determined not by the amount of knowledge acquired in an educational organization, but by the ability to act independently in a practical professional situation. The lack of this skill leads to constant stress, mistakes in work, conflicts with superiors and colleagues, which, in turn, affect both career advancement and health.

The analysis of the federal state educational standards of higher education shows that at present the activities of universities should be focused on required (planned) results of the mastering the educational program (competences of graduates) (Tastan et al., 2018; Garanina, Balyaev and Ionova, 2019; Merkitabayev et al. 2018). At the same time, the set of planned learning outcomes should provide the achievement of all the competencies (both general cultural and professional) established by a particular educational standard.

The achievement of these results seems to be impossible without the development of students' skills in independent work. Ideally, a university graduate should be ready to solve problems he may face in his professional activities. Employers, choosing a new employee, are often oriented exactly on the ability of a candidate to solve assigned tasks in a workplace (Lee et al., 2018).

The ability to act independently usually comes with the accumulation of professional experience; the question is how quickly a yesterday graduate of a university can unite the knowledge and skills gained during the training and practical needs. The training within the framework of the implementation of the competence approach to education which is reflected in the federal state educational standards of higher education is oriented namely to the acceleration of the transition from theory to practice. If earlier higher education was often aimed at obtaining by a student as much knowledge as possible (both for future professional activities and general cultural ones), then the competence approach is more focused on practical needs. A.A. Verbitsky notes that "the implementation of a competency-based approach in education

means changing the whole pedagogical system of general education and vocational school, a transition to a new type of training and education, or using a new-fashioned combination, to a new educational paradigm.” A university graduate should be ready to solve professional tasks independently, and therefore the objective of this research is to substantiate the assumption that it is readiness which is a necessary prerequisite for independent practical activity ([Synytsya, S. V., Shesterova, L. E., & Synytsya, T. O. \(2014\).\).](#))

METHODOLOGICAL FRAMEWORK

Literature Review

In the explanatory dictionary of the Russian language of S. I. Ozhegov and N. Yu. Shvedova readiness is defined as “agreement to do something (express readiness to help) or as a state in which everything is done, everything is ready for something”.

In Russian psychology, readiness for activity is most often considered within the framework of three approaches:

- Personal;
- Functional;
- Psychophysiological.

As part of the personal approach, readiness is determined through the manifestation of individual personality features, which are due to the effective nature of activities, and their integrity. Supporters of this approach pay considerable attention to the moral and psychological component of readiness for action: awareness of the social and personal significance of work, love for their work joy and enjoyment of work, ability to work in a team and in its interests ([Moskovchenko et al., 2019](#)).

Supporters of the functional approach consider readiness as a certain mental state of the individual. Readiness is regarded as a short-term or long-term state, and mental functions are activated in the prevailing state at a certain moment. Special attention is paid to the ability to mobilize oneself physically and mentally, including sports competitions.

The psycho-physiological approach to the understanding of readiness assesses readiness as the optimal state of mental and physiological functions of the body, determining the ability to perform a specific professional activity.

Within these approaches, researchers identify the various components of readiness ([Nekhoroshkov, A. V. \(2016\).](#))

So, based on the position of M. I. Dyachenko and L. A. Kandybovich, the components of readiness, serving as a complex mental education, are:

- A cognitive process, reflecting the main areas of activity ([Cole, A. L., & Knowles, J. G. \(1995\).\);](#)
- Emotional properties that affect the subject ambiguously and activate his psychological and physical activity;
- The will-based component which helps to carry out difficult actions in the process of achieving the goal.

Besides, psychologists point to another variant of the selection of the readiness components:

- Intellectual component - awareness of the necessary results of the upcoming activities, the definition of tools to achieve them, responsibilities, a forecast of activities;
- Emotional component - confidence in success, a positive attitude, a sense of responsibility;
- Motivational component - the desire to achieve the goal, interest in the result, focus on the task.

According to another point of view, readiness includes a number of interrelated personal components:

- Motivational - positive attitude, interest in activities;
- Orientational, cognitive - certain knowledge, ideas about the features and conditions of activity, its requirements for the individual, the level of development of cognitive processes: sensations, perception, memory, thinking, imagination, attention;
- Operational, procedural - variants of activity, necessary knowledge, skills, abilities, processes of analysis, synthesis, comparison, generalization, etc., transfer of individual experience into everyday practice;
- Will component - responsible attitude to the activity, dedication, self-control;
- Evaluative, reflexive - assessment of their own readiness and compliance of the process of solving problems with optimal samples.

With regard to the readiness of university teachers to use distance learning technologies in the conditions of the information educational environment N. V. Lomovtseva, E. V. Tchubarkova, and A. A. Karasik, the following components are identified:

- Motivational - a teacher himself is interested in actively introducing the technology into the educational process and convincingly demonstrates the advantages of joint activities in the network space to the students;
- Technological - a teacher should be able to work professionally with pedagogical software, have skills and methods of using appropriate tools in the educational process;
- Emotional-will - involves the concentration of forces on the solution of educational and pedagogical tasks based on distance learning technologies, the ability to overcome doubts, fear, and other psychological obstacles;
- Communicative - includes the ability to create a positive background during on-line work and to carry out an individual approach to students; free possession of skills and methods of written communication;
- Reflexive - is the adequacy of self-esteem of their own ideas, suggestions, experiences, activities directly, taking into account the opinions of students.

The very similar structure of the future teacher's readiness to work in the system of distance education of children with disabilities, including motivational, cognitive, operational, computer-informative, reflexive-evaluative components, is proposed by Yu. I. Markelova, A. A. Malygin and T. A. Voronova.

Research Methods

The following methods were used in the research process: theoretical (method of analysis and systematization of psychological and pedagogical literature; generalizations and classifications); empirical (observation, interview).

Experimental Research Base

The experimental base of the research was the Russian State Vocational Pedagogical University.

Stages of Research

The study of the problem was carried out in 4 stages:

- At the first stage, the analysis and synthesis of scientific literature on defining the concept and types of readiness were conducted;
- At the second stage, the analysis of the normative documents regulating the organization of sport and health activities of university students was conducted;
- At the third stage, the research of indicators of students' motor activity was conducted;
- In the fourth stage, the questionnaire of university students was conducted.

RESULTS

Determining the Significance of Readiness to Independent Physical Training during the Examination Session to Form a Future Specialist

It is necessary to note the specifics of teaching physical culture in many Russian universities. The absence of extracurricular practical classes in physical culture prescribed or recommended at the level of normative documents in the framework of students' independent work can be found if we look at university curricula developed in the accordance with the federal state educational standards.

At the same time, the conducted studies show that it is impossible to get the amount of physical activity of students in the accordance with the optimum level only through the use of the physical education classes of the curriculum.

Thus, the discipline "Applied Physical Education" includes instructor-led forms of organization of physical education and sports activities in students only twice a week within the framework of the modern federal state educational standard, which continued only for 4 hours. This amount of time allocated for physical exercise cannot satisfy the mode of physical activity for young people (university students) aged 18–25 years. At the same time, every-week physical exercises in the amount of 10–12 hours (1.5–2 hours per day) develop a stable background for an increase of physical preparedness of students, therefore, increasing the level of their physical health.

As a rule, the indicators of students' physical activity during examinations should be taken into account to change significantly in the way of reducing the time allotted for physical education. The results of the research conducted in the Russian State Vocational Pedagogical University showed that the physical activity of 1st and 2nd-year students is 54-60% of the required (18000 - 22000 steps) in the period of studies, it is almost halved during the examination period (December, May). It is not possible to regulate the students' physical activity during the exams by conducting organized (audit) physical education classes, as regulatory documents (including curricula) is not provided for such classes during the

examinations and tests. At the same time, keeping physical activity at the required level, even during the examinations, contributes not only to the student's health but also to successful attestation ([Ericsson, K. A. \(2004\).](#)).

Taking into account these circumstances, namely, readiness to independent physical training during the exams can be an indicator of the future specialist's readiness to act in a problem situation.

Types of Readiness

The researchers define the following types of readiness during the classification:

- General (long-term) readiness, which is a stable system of professionally important personal qualities, including its experience, knowledge, skills that are necessary for successful activity in many situations - in fact, it is about the potential ability to act;
- Situational (short-term) readiness, which finds its expression as the actualization of long-term readiness, enhancing its effectiveness - that is, the ability to act in a particular situation (“here and now”).

The classification of readiness types, which is based on the division of readiness into long-term and readiness as a temporary state of a person, appears to be similar.

Basing on the features of the researched problem, many researchers turned to specific types of readiness, which can be defined as “special” types of readiness.

So, mentioning the following special types of readiness can be found in the literature:

- To professional activities;
- To professional self-determination;
- To pedagogical activity;
- To study (for example, at school);
- For competitions;
- To educational work in the school;
- To an organization of the children's team;
- To training in the field of physical education;
- To military service;
- To extreme action;
- To self-education.

As you can see, most of the special types of readiness are variants of readiness to professional activities, in this connection their content is mostly similar, and the study of these types of readiness only allows to reveal the specificity of readiness in relation to a particular field, which in itself can have significant practical importance. Such readiness can be defined as “professional readiness”.

Another group of the listed special types of readiness implies readiness to act in a certain (often critical, stand out from ordinary life) situation, which can be called "problem readiness".

Peculiar Features of the Readiness of University Students to Self-Study Physical Culture during the Examination Session

The study of this type of special readiness, such as the readiness of university students to independent physical training during the examination session, the assessment of whose significance was not previously the subject of a separate study, is of particular interest for our research purposes.

In our opinion, the specificity of this type of readiness is largely determined by the fact that it includes the features of both types of readiness to professional activities (although, in fact, does not apply to it) and the readiness to act in a problem situation.

On the one hand, the result of independence in an individual is the ability to adapt to new conditions in the process of his behavior. At the same time, the readiness of a student, namely, to self-study (which is similar to readiness to future professional activity, ie, similar to professional readiness) is a factor contributing to the development of independence in general.

Independent physical education classes, which are a manifestation of independence in general, are at the intersection of the formation of a healthy lifestyle habit and developing the skill of independent behavior in a practical situation.

On the other hand, for the student, the exam period is characterized by the emergence of a complex, stressful situation that requires significant tension of mental and physical abilities. Readiness to act in that situation goes beyond the scope of readiness only for professional activity and has the features already of a problematic readiness.

Thus, readiness to independent physical training during the examination is a unique, integral type of readiness, combining the features of professional and problem readiness, and, in this connection, it deserves a separate study, as it can be regarded as an objective indicator of the development of a future specialist's skill to act independently.

In fact, the readiness to independent physical training during the exams is a model of complex life and a professional situation that may have a place after graduation.

The necessity of exams and tests is similar to the problem of urgent problem-solving in professional activities (and the connection with professional activities is clearly shown, as most of the passed subjects are usually connected with the future profession), and independent physical education during the exams is similar to other non-work related but time-matched issues that need to be resolved at the same time.

Readiness to independently work at the end of the university should allow the graduate to organize own time properly, prioritize and resolve the situation in the complex, avoiding an out-balance of professional and other (household, family, social, health-oriented, etc.) activities. Competence approach, which is reflected in the federal state educational standards of higher education, is focused, namely, on the training of such a specialist ([Bishop, K. L., Sharp, J., & Ohtake, P. J. \(2017\).](#)).

The state of Students' Readiness to Independent Physical Education at the Present Stage

The results of our research show that university students tend to donate physical education classes in favor of preparing for exams and tests during the session.

Students from 1 to 4 years of full-time education of all institutions of the Russian State Vocational Pedagogical University in the amount of 124 people took part in the research. The age of respondents ranged from 16 to 23 years. Indicators of interest and motivation to physical culture and sport during the examinations were determined in all respondents, using a questionnaire consisting mainly of closed questions.

The study shows that most of the interviewed students lead an active lifestyle. 107 respondents attend physical education classes, but 67 out of 124 people say that they would miss these classes if they had the chance.

It can be noted that 48% of students experience "high spirits", 16% - joy and inspiration, and only 19% - fatigue, indifference and tension in training sessions on the subject "Physical Education".

Morning workout or exercise for students also has a wellness meaning. At the same time, only 17 people always do morning exercise, 43 people sometimes, and 64 do not do at all.

The results of the survey showed that most of the surveyed students are characterized by high physical activity combined with a neutral attitude to physical culture as an activity.

As the analysis of the survey results shows, the most of students believe that physical education classes in the pre-examination period and during the exams hinder students, as students' efficiency decreases, their well-being deteriorates, and nervous tension increases significantly during this period. Respondents noted that they could not focus on their main occupations: preparing for exams and tests, writing term papers, etc ([Filenko, L., Ashanin, V., Basenko, O., & Petrenko, Y. \(2017\).](#)).

DISCUSSIONS

It should be noted that a quite significant amount of research is devoted to certain aspects of the readiness development in connection with the learning process. So, A. A. Opletin notes that the purpose of the formation of readiness in the system of self-development of an individual by means of physical education is the formation of the process of appropriation (by a subject of activity) of socio-moral and physical education values during their interaction. E. I. Sheenko, E. V. Bodyukov, and V. V. Yurov rightly pointed out that physical training as a basis for physical education and his evaluative criterion - test, do not have a long-term stimulating factor for physical self-improvement and self-education of students. At the same time, coercion (in the form of compulsory physical education classes as part of the educational process) is not considered by these authors as a modern way to solve the problem of attracting students to regular physical education, sports, and adhering to the norms of a healthy lifestyle.

T. A. Solostina pays attention to such an important sense of the independent activity of students in higher education as the acquisition of the necessary personality-professional qualities.

In his study, A. V. Lotonenko, O. A. Grigoriev and G. R. Gostev proposed the technology of formation of readiness to the independent work of future teachers of physical education and noted the influence of this readiness on the process of the specialist formation ([Martin, J. N., & Nakayama, T. K. \(2013\).](#)).

At the same time, the readiness to independent physical training during the examination was not considered in this works.

CONCLUSION

If we consider the readiness to independent physical training during the exams as an indicator of the future specialist's readiness to act in a problem situation, then the conclusion is that the independent work skill of the students involved in the research is not well developed. It is significant that, in general, the picture does not change closer to senior courses.

Readiness to independent physical education during the examination should be noted to be taken into account in the specified quality only if the physical education of students is built in an appropriate manner in the university.

A student's readiness to perform physical exercises independently (including during the exam session) is the result of this activity. It is important that the student can obtain the necessary theoretical knowledge, as well as learn the mechanism of their correct application during their studies at the university.

This problem cannot be solved by simply increasing the hours envisaged by the curriculum for independent work in the framework of the subject "Physical Education", i.e. increase in quantity. A qualitative change in the approach to independent work of students, an appropriate system of actions in her organization and planning are necessary to achieve the desired effect.

Analysis of existing approaches in relation to the formation of skills of independent exercise allows defining three stages of the learning process.

At the first stage, theoretical training of students is traditionally carried out, which is quite justified. At this stage, students receive general knowledge about the construction of independent physical training, the relevant curricula (if any take place), the methods and criteria for self-assessment of physical condition, physiology, etc ([Anderson, A. G., Knowles, Z., & Gilbourne, D. \(2004\).](#)).

The second stage is the study of the actual methods of conducting self-study with reference to the daily routine, learning the approaches to establishing the physical qualities that the student wants or needs to develop, as well as choosing the necessary exercises for this.

At the final stage, students get acquainted with the methodology of how to develop physical qualities, learn how to perform exercises in self-taught classes ([Biggs, J. B. \(2011\).](#)).

The result of the study should be a conscious approach of the student to doing independent physical exercises. On the one hand, in this case, during the independent work, the student will build classes in the way to achieve the planned desired results. On the other hand, by correctly applying this knowledge, the student is able to prevent possible harm to his health, which could have been caused if a student does not possess relevant information, including theoretical education.

The teacher can find out how learners have mastered theoretical knowledge and whether they are able to put it into practice by proposing to a student to create a set of exercises for a particular person, whose health and physical qualities the student has relevant information about (for example, for groupmates). Also, a student can be offered to conduct part of the lesson as part of the learning process (usually a warm-up or the final part of a lesson). In this case, the teacher has the opportunity to point to certain shortcomings in the performance of the task by the student ([Videbeck, S. L. \(1997\).](#)).

RECOMMENDATIONS

We believe that the correct construction of educational activities at the university in relation to the subject "Physical Education" will reveal the potential of assessing the formation of readiness to independent physical education during the examinations as an indicator of the future specialist's readiness to act in a problem situation.

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REFERENCES

1. Ates, B. (2018). Enhanced Body Composition and Physical Fitness in Prepubescent Soccer Players. *Pedagogical Research*, 3(3): 10-24. <https://doi.org/10.20897/pr/3896>
2. Garanina, Z.G., Balyaev, S.I., and Ionova, M.S. (2019). The Role of Self-Attitude in the Personal and Professional Development of High School Students. *The Education and science journal*, 21(1): 82-96. <https://doi.org/10.17853/1994-5639-2019-1-82-96>
3. Lee, Y., Capraro, R. M., & Capraro, M. M. (2018). Mathematics Teachers' Subject Matter Knowledge and Pedagogical Content Knowledge in Problem Posing. *International Electronic Journal of Mathematics Education*, 13(2), 75-90. <https://doi.org/10.12973/iejme/2698>
4. Merikbayev, T., Seisenbayeva, Z., Bekkozhanova, G., Koblanova, A., & Alikhankyzy, G. (2018). Oppositions in the conceptual and linguistic category of time. *Opción*, 34(85-2), 116-148.
5. Moskovchenko, O.N., Zakharova, L.V., Tretyakova, N.V., Lyulina, N.V., Kattsin, O.A., and Savolaynen, G.S. (2019). Application of Hardware and Software Complex for Individualisation of Students' Sport and Recreational

- Physical Activities. *The Education and science journal*, 21(1): 124-149. <https://doi.org/10.17853/1994-5639-2019-1-124-149>
6. Taştan, S.B., Davoudi, S.M.M., Masalimova, A.R., Bersanov, A.S., Kurbanov, R.A., Boiarchuk, A.V., Pavlushin, A.A.(2018). The Impacts of Teacher's Efficacy and Motivation on Student's Academic Achievement in Science Education among Secondary and High School Students, *EURASIA Journal of Mathematics Science and Technology Education*, 14(6), 2353-2366. <https://doi.org/10.29333/ejmste/89579>
 7. Filenko, L., Ashanin, V., Basenko, O., & Petrenko, Y. (2017). Teaching and learning informatization at the universities of physical culture.
 8. Biggs, J. B. (2011). *Teaching for quality learning at university: What the student does*. McGraw-hill education (UK).
 9. Synytsya, S. V., Shesterova, L. E., & Synytsya, T. O. (2014). Assessment of communicative abilities of students of pedagogical universities on the results of primary instruction on improving aerobics. *Physical education of students*, 18(3), 56-60.
 10. Martin, J. N., & Nakayama, T. K. (2013). *Intercultural communication in contexts*. New York, NY: McGraw-Hill.
 11. Nekhoroshkov, A. V. (2016). Pupils' Cognitive Activity Stimulation by Means of Physical Training. *International Journal of Environmental and Science Education*, 11(8), 1205-1212.
 12. Reynolds, P. J. (2005). How service-learning experiences benefit physical therapist students' professional development: a grounded theory study. *Journal of Physical Therapy Education*, 19(1), 41-54. <https://doi.org/10.1097/00001416-200501000-00006>
 13. Лыкам, Л. Б. (2016). The didactic model of education of the future elementary school teachers to activities for the prevention of violations of children's posture.
 14. Wessel, J. A., & Dummer, G. M. (1999). History of teaching and research in adapted physical activity. *JL Haubenstriker, & DL Feltz, (Eds.)*, 100, 1-38.
 15. Felder, R. M., & Brent, R. (2003). Designing and teaching courses to satisfy the ABET engineering criteria. *Journal of Engineering Education*, 92(1), 7-25. <https://doi.org/10.1002/j.2168-9830.2003.tb00734.x>
 16. Ericsson, K. A. (2004). Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains. *Academic medicine*, 79(10), S70-S81. <https://doi.org/10.1097/00001888-200410001-00022>
 17. Videbeck, S. L. (1997). Critical thinking: Prevailing practice in baccalaureate schools of nursing. *Journal of Nursing Education*, 36(1), 5-9.
 18. Bishop, K. L., Sharp, J., & Ohtake, P. J. (2017). A Hybrid Simulation-Based Pre-Professional Physical Therapist Intensive Care Unit Course. *Journal of Acute Care Physical Therapy*, 8(2), 65-75. <https://doi.org/10.1097/JAT.0000000000000055>
 19. Cole, A. L., & Knowles, J. G. (1995). Methods and issues in a life history approach to self-study. *Teachers who teach teachers: Reflections on teacher education*, 130-151.
 20. Newble, D. I., & Clarke, R. M. (1986). The approaches to learning of students in a traditional and in an innovative problem-based medical school. *Medical education*, 20(4), 267-273. <https://doi.org/10.1111/j.1365-2923.1986.tb01365.x>
 21. Prasad, G., & Bhar, C. (2010). Accreditation system for technical education programmes in India: A critical review. *European Journal of Engineering Education*, 35(2), 187-213. <https://doi.org/10.1080/03043790903497294>
 22. Raisler, J., O'Grady, M., & Lori, J. (2003). Clinical teaching and learning in midwifery and women's health. *Journal of midwifery & women's health*, 48(6), 398-406. [https://doi.org/10.1016/S1526-9523\(03\)00304-0](https://doi.org/10.1016/S1526-9523(03)00304-0)
 23. Anderson, A. G., Knowles, Z., & Gilbourne, D. (2004). Reflective practice for sport psychologists: Concepts, models, practical implications, and thoughts on dissemination. *The Sport Psychologist*, 18(2), 188-203. <https://doi.org/10.1123/tsp.18.2.188>