Sporting activity as a means of developing general cultural competencies of students of a pedagogical higher education institution

La actividad deportiva como medio para desarrollar competencias culturales generales de estudiantes de una institución pedagógica de educación superior

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ABSTRACT:
The article explores and substantiates sporting activity as a means of developing general cultural competencies of students of a pedagogical higher education institution. On the basis of analysis of scientific-pedagogical literature, the content of the concept of general cultural competency is revealed, and the general cultural competencies of students of a pedagogical higher education institution in sporting activity are distinguished. The specific features of development of general cultural competencies of students of a pedagogical higher education institution in sporting activity are determined. Pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sporting activities are revealed and substantiated. The effectiveness of the pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sporting activities is revealed and substantiated.

RESUMEN:
El artículo explora y corrobora la actividad deportiva como un medio para desarrollar las competencias culturales generales de los estudiantes de una institución pedagógica de educación superior. Sobre la base del análisis de la literatura científico-pedagógica, se revela el contenido del concepto de competencia cultural general, y se distinguen las competencias culturales generales de los estudiantes de una institución de educación superior pedagógica en la actividad deportiva. Se determinan las características específicas del desarrollo de las competencias culturales generales de los estudiantes de una institución pedagógica de educación superior en la actividad deportiva. Se revelan y corroboran las condiciones pedagógicas para el desarrollo de las competencias culturales generales de los estudiantes de una institución pedagógica de educación superior en actividades deportivas. Se corrobora la efectividad...
1. Introduction

Health, being a priority value of any person, forms the basis of professional success of a future pedagogue. Noting the progressive decrease in the total volume of motor activity against the background of increased psycho-emotional loads, such authors as Feyzkhademi et al. (2010); Eys et al. (2009); Conroy, & Elliot (2004) observe the growing requirements for professional activity, the physical condition of a pedagogue, the need for purposeful use of sporting activity to preserve and strengthen the health of both the teacher and the student. There arises a need to renew the organization of sporting activity in a pedagogical higher education institution on the competency basis and create conditions for the development of appropriate general cultural competencies of future pedagogues.

In pedagogical science, certain theoretical prerequisites have been formed for solving the problem of the development of general cultural competencies of students in sporting activity. Numerous studies of such authors as Rakhimbekova et al. (2015); Kramsch (2006); Brown-Rice, & Furr (2013); Hoffmann (1999); Sundburg (2001) are devoted to studying competency as a scientific category applied to education. In the works of Zhumabaeva et al. (2016); Mirza (2013); Day (1994); Henner (2004), some aspects of the development of general cultural competencies of students are investigated. In the field of physical culture, such authors as Mouratidou et al. (2012); Boardley, & Kavussanu (2007); Onalbek et al. (2013); Omarov et al. (2016); Aghazadeh, & Kyei (2009); Celik et al. (2013) distinguish health-preserving competency, considering it as professional competency of students of a pedagogical higher education institution. In the context of our study, special attention should be paid to the works by Traclet et al. (2011); Çalışkan (2013); Çalışkan (2006); Bowker (2006); Sakenov et al. (2012); Caliskan (2013); Hodge, & Lonsdale (2011), where various aspects of the physical culture of students are considered. The analysis of scientific research on the problem under consideration shows that the traditional system of physical education in a higher education institution, mainly focused on solving motor problems, does not fully provide solutions to the problems of general cultural development of students. Therefore, it is necessary to involve students in active sporting activity in order to form value attitude to their physical development, awareness of personal responsibility for maintaining their health, and gaining experience of health-creating activity.

The analysis of the situation of the development of higher pedagogical education, the requirements of modern society to the pedagogue, the state of the existing system of physical education has made it possible to identify a number of contradictions:

- the contradictions between modern requirements of society to the quality of training of a competent specialist capable of health-creating activity and the existing system of physical education in a pedagogical higher education institution;
- between the need to create conditions in the system of higher education for the development of general cultural competencies of future specialists and the insufficient level of scientific substantiation of the pedagogical conditions for their development in the sporting activity of students of a pedagogical higher education institution;
- between the special features of the development of general cultural competencies in sporting activity of students of a pedagogical higher education institution and the practice of physical education of students in the system of higher education.
their implementation in the professional training of future pedagogues. These contradictions determine the problem of our research: what are the pedagogical conditions for the development of general cultural competencies in the sporting activity of students of a pedagogical higher education institution? This research problem determines the purpose of our research: to scientifically justify and experimentally test the sporting activity as a means of developing general cultural competencies of students of a pedagogical higher education institution.

2. Methods
The methodological foundation of the research is the personality-activity approach, according to which the personality is viewed as a subject of activity, while the personality itself, being formed in activity and in communication with other people, determines the nature of this activity and communication. It allows considering the process of development of general cultural competencies as an activity to incorporate the values of health and physical self-development, taking into account the satisfaction of diverse needs in the field of physical culture, as well as the capabilities and abilities of an individual and relationships that are developed in the process of its realization. In addition, the development of general cultural competencies takes place in activity and communication and is manifested there. We consider the ideas about the essence of the modern educational process in a pedagogical higher education institution; the statements of the competence approach in education, allowing considering the educational process in a higher education institution as a process of developing the competencies of students; theoretical statements of the culturological approach concerning the need to develop the general culture of future specialists; the sporting activity as the basis for the formation of physical culture of the individual; theoretical statements concerning the organization of independent work in a higher education institution. The following methods are used: theoretical ones (theoretical analysis and synthesis, classification, systematization, generalization, analysis of normative documents for higher education); empirical ones – diagnostic (questionnaire survey, observation, testing, questioning, content analysis, and the method of expert assessment) and experimental (ascertaining and forming pedagogical experiment).

3. Results
Summarizing various points of view of the authors on the content of general cultural competencies (Mirza, 2013; Day, 1994; Henner, 2004), we can give the following definition of the concept of general cultural competency: this is the results of education, expressed in the ability to solve personally significant, professional problems, the tasks of social interaction based on the incorporated ideas about the surrounding world, the values and traditions of modern society, the knowledge and skills necessary for the successful carrying out of the activity manifested in all forms of a person’s behavior. It is generally recognized that the basis of life's well-being and success in professional activity is the optimal level of health that is achieved in the process of health-creating, including sporting activities throughout life. Taking into account the social requirements of society for the training of a modern specialist, the sporting activity in a higher education institution should be viewed as a kind of activity, in the process of which the ability of future specialists for preserving and strengthening their health throughout life, for the personal and professional self-development with the use of physical exercises is formed, including the satisfaction of diverse needs in the field of physical culture, the capabilities and abilities of an individual, as well as the relationships that are developed between people.

Analyzing the approaches of such researchers as Boardley, & Kavussanu (2007); Onalbek et al. (2013); Omarov et al. (2016); Mirza (2013); Day (1994); Henner (2004) and other authors, as well as educational standards regarding the content of general cultural competencies, we determine that the general cultural competencies of students of a pedagogical higher education institution in sporting activity are the results of education expressed in the readiness to solve personally important, professional problems, the tasks of social interaction on the basis of the incorporated ideas about physical culture as a
component of the general cultural development of an individual, the value attitude to health and awareness of the need to observe the principles of healthy lifestyle for successful personal and professional self-realization, knowledge and skills in the field of physical culture, contributing to the formation of experience of health-creating behavior. To solve the research problem, we distinguish general cultural competencies identified in the education standards as a result of training in the discipline of "Physical Culture" (a person’s readiness to use the methods of physical education and self-education to enhance the body's adaptive reserves and promote health, readiness to interact with colleagues, work in team). Proceeding from the understanding of general cultural competencies, we consider it necessary to distinguish general cultural competency: a person's readiness to carry out sporting activity for solving the problem of health creation. In our opinion, such an addition to the competencies already presented in the standard makes it possible to consider the general cultural competencies of students of a pedagogical higher education institution in sporting activity as a basis for forming the ability of future teachers to carry out health-creating activity, both for themselves and the students. Considering competencies as an integral new formation that manifests itself in activity, the authors, at the same time, identify the structure of competencies that includes the main characteristics that ensure students' readiness to solve various problems. The analysis of the works by Onalbek et al. (2013); Omarov et al. (2016); Mirza (2013) and other authors allows determining the structure of the considered general cultural competencies, including the motivational-value, cognitive, operational-activity and evaluative-reflective components. The motivational-value component is the positive attitude to sporting activity as a means of personal and professional self-development, motivation for its realization, energetic activity of students in maintaining and strengthening their health. The content of the cognitive component is determined by the totality of theoretical knowledge in the field of physical culture. The operational-activity component is represented by the skills and experience of planning, implementing sporting activity, monitoring its effectiveness, by the ability to organize constructive communication, productive interaction in sporting activity. The evaluative-reflective component is self-evaluation of the successfulness of solving various problems in sporting activity, analysis of one’s own experience in sporting activity and the experience of colleagues.

The analysis of the tendencies of the education renewal on the competency basis and identification of the main directions of changing the teaching of sporting activity in a pedagogical higher education institution actualize the problem of updating sporting activity, determining and substantiating the pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sports activity. The main idea of the research is that the development of general cultural competencies of students of a pedagogical higher education institution in sporting activity occurs not only in the process of solving motor tasks directed at increasing the level of physical and technical preparedness, but also in the process of solving personally important and professional problems by means of sports activities. As the first condition, we consider designing the content of teaching sports activities, taking into account the specific features of the development of general cultural competencies of students in a pedagogical higher education institution. In determining the content of training, we proceed from the fact that sporting activity is not only a means of providing motor activity and health, but is considered as a necessary component of general cultural competencies in the preparation for future pedagogical activity. The process of the sporting activity training is conventionally divided into three stages, corresponding to the stages of professional development of future pedagogues, each of which is directed to achieving certain goals. The first stage is the formation of motivation for health-creating activity, facilitation of self-determination of students in sports activities, the design and implementation of an individual program of personal self-development in sporting activity, taking into account the specificity of future pedagogical activity. The second stage consists in the formation of ideas about the necessity and possibility of using elements of sports activities in solving the basic groups of professional problems; mastering the knowledge and skills that will allow using sporting activity for personal self-development and strengthening health, as well as in future pedagogical activity. The accomplishment of the tasks at the second stage presupposes
mastering a wide range of the sports activity means, the knowledge of their purpose and possibilities in solving personally significant and professional problems, the ability to use them in real life and professional activity, which contributes to widening the individual sporting experience of students. At this stage, the role and business games are used, discussions are held, which is accompanied by an increase in the proportion of independent work of students and allows mastering the ways of pedagogical communication. The third stage is the assistance in acquiring the creative experience of sporting activity, providing opportunities for students to apply their knowledge and skills in real practical activities. In the process of training at this stage, the skills of analyzing, predicting and evaluating life or pedagogical situation from the perspective of the possibility of using elements of sports activity for its solving are formed; gradual transition of students to independent sports activity is realized; the skills of designing, realizing, controlling the efficiency and correcting one’s actions are developed, an integral experience of health-creating activity is formed. The content of the third stage also includes the tasks related to the organization of the health-creating activity of students in the conditions of professional activity, ensuring the transformation of the personal experience of sporting activity of students into the experience of solving professional problems by means of physical culture. To realize the second condition (independent sporting activity of students is directed to solving personally significant problems), the content of independent work of students is developed. The assignments for independent work are formulated in the form of tasks solved by students in the independent sporting activity. Depending on the stage of professional formation, students solve the tasks aimed at finding information that is necessary for solving a specific task, testing some methods, acquiring the experience of independent solving personally significant and professional problems, which contributes to the activation of independent sports activities of students, ensuring its focusing on achieving the goals of education. The realization of the third condition (the program of continuous pedagogical practice is supplemented by professional tasks taking into account students’ acquiring the experience of sports activities) presupposes several stages: the training practice in the discipline of "Physical Culture" – for obtaining the primary professional skills; pedagogical practice – for acquiring the experience of comprehensive solving professional tasks based on the inter-subject integration of necessary knowledge and skills; pedagogical practice – for mastering integral professional activity in the real educational process. Consistent inclusion in the program of continuous pedagogical practice of the tasks of professional self-development and professional tasks solved in sports activity leads to the formation of individual creative experience of the health-improving activity of the future teacher. The fourth condition is the activation of the project activity of students, which involves the development and implementation of the sports and health projects, which is stimulated by teachers through the formation of the need for it, the creation of a situation of interest, the use of the methods of stimulation, competitions, etc. One of the motivating factors is the need to provide a report on the implemented project for obtaining additional points in the final test for the discipline; therefore, almost all the students of the class gradually become the participants in the implementation of projects.

4. Discussion

51 students of the Pedagogical Department participated in the experiment. Defining competencies as the ability to solve various problems, as a criterion for the effectiveness of the pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sporting activity, we consider the presence of positive dynamics of development of all components of general cultural competencies when students solve personally important problems by means of sporting activity, the formation of each of them is connected with the formation of characteristics and properties as part of an integral system. The indicators of effectiveness are the positive dynamics of development of 1) the motivational-value component; 2) the cognitive component; 3) the operational-activity component; 4) the evaluative-reflective component of the general cultural competencies of students in sporting activity. These indicators allow assessing the manifestation of the considered general cultural competencies in sports activity during
solving personally significant problems, which provides an opportunity to obtain reliable information about the effectiveness of pedagogical conditions for the development of general cultural competencies of students. The levels of students' solving the personally significant tasks (high, average, low) are defined. The characteristics of the levels are formulated in accordance with the stages of solving problems. The high level is connected with a deep analysis of the situation, clear formulation of the problem, goals, the student does not experience difficulties in finding the best ways to achieve the goal in both standard and non-standard situations, manifests a creative approach in solving problems, conducts a thorough analysis of the result obtained, the mistakes made and, if necessary, other ways of solving the problem. The average level: the student can analyze the situation, formulate the problem, goal and choose the best methods of action in standard situations; the effectiveness of actions in non-standard situations depends on external circumstances; when solving problems, he/she uses the already tested methods of actions, performs insufficiently complete analysis of the result obtained and mistakes made. The low level: the student performs a superficial analysis of the situation, does not clearly formulate problems, goals; he/she often uses an intuitive choice of the method of solving the problem, stereotyped forms prevail in the actions; when analyzing the result obtained, he/she does not rely on the criteria.

Like any other dynamic process, the ability to solve problems develops with the development of values, motives, goals, knowledge, skills, and accumulation of experience. In this connection, we identify some indicators, on the basis of which it is possible to formulate the level characteristics and define diagnostic tools allowing revealing the degree of students' readiness for comprehensive solving personally significant problems in sporting activity:

- the motivational-value component (understanding of the importance of physical culture in the development of personality and preparation for future professional activity, emotional attractiveness, positive motivation, regularity of studies during academic and extracurricular time, efforts in organizing independent activity, independence in performing physical exercises);
- the cognitive component (amount and quality of knowledge on physical culture and sports, psycho-physiological and pedagogical foundations of sporting activity, knowledge of the ways of designing, organizing, performing and monitoring sports activity);
- the operational-activity component (the level of motor preparedness of students, the ability to find the necessary information and apply it in solving professional problems, organizational-methodological skills of constructing independent physical exercises, the ability to organize individual and group sports activities, the ability to actively engage in collective activities aimed at achieving common goals, ability to interact with others, performing different roles);
- the evaluative-reflective component (the ability to carry out self-assessment of the level of health and functional state of the organism, mastery of self-control methods, the ability to control one's own actions, as well as actions and behavior of partners).

Ensuring the integrity of the process of assessing the development of general cultural competencies in sporting activity takes place in choosing diagnostic tools that are adequate to each of the components and, at the same time, provide the possibility of demonstrating their complex manifestation in a specific situation. To diagnose the development of the considered general cultural competencies of students, we conducted: monitoring of sporting activity of students, including the regularity of their involvement in physical training, the amount of motor activity, the achievements of students in physical culture; the content-analysis of the essays; testing of students' knowledge; solving personally important and professional problems; analysis of the diaries of self-control; expert evaluation, self-evaluation and mutual evaluation of students’ achievements. During the ascertaining stage of experimental work, it was revealed that students have a predominantly low development level of the components of general cultural competencies. This confirms the topicality of our research and the need to create the conditions for the development of the competencies in issues of the sports activity.

The main goal of the formative stage of experimental work was the implementation in the
The learning process of the selected pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sporting activity. Two groups were singled out of the students participating in the experiment. The control group (CG) included the students attending academic studies and performing the training program in the discipline of "Physical Culture". The process of training the students of the experimental group (EG) included the realization of the identified and substantiated by us pedagogical conditions for the development of the considered general cultural competencies:

- mastering the competence-oriented educational program of the discipline of "Physical Culture";
- carrying out independent work tasks by students, formulated in the form of personally significant tasks related to health preservation, solved in independent sports activity;
- solving the professional tasks, supplementing the program of continuous pedagogical practice and aimed at the acquisition of sports experience by students;
- realization of projects related to physical culture and health.

In the process of experimental work in the physical education classes, students performed tasks that contributed to the development of a holistic experience in solving various problems, requiring creative use of the available means, methods and forms of physical activity, stimulating independence in finding the optimal solution of the problem, allowing them to test themselves in various social roles. Students became acquainted with and tested a variety of ways to solve health problems based on the use of exercises in various kinds of sports, while trying to find solutions that are based not only on copying the teacher's actions, but also on personal experience and knowledge acquired in the learning process, on one's own vision of the problem. In the process of experimental training, great attention was paid to the methods and techniques for developing reflexive thinking, students’ mastering the necessary skills for exercising self-monitoring of the functional state, self-assessment of one's own readiness for using sports facilities for personal and professional self-development and, on their basis, correcting one’s sporting activities. As a result, students learned to determine the purpose of their activity, to realize their activities in accordance with the logic they constructed, to carry out self-monitoring and self-evaluation of the results of their own sporting activity. The completion of independent work tasks, as a rule, was preceded by methodical-practical classes and presupposed an independent search and selection of necessary information, various methodological developments and their practical implementation in the independent physical activity of students. The results of the independent work were demonstrated and discussed in the training group. The knowledge and skills acquired in the methodical-practical exercises found their application in the performance of tasks of continuous pedagogical practice, where students tested in reality the correctness of the chosen solutions, carried out their correction, which contributed to the formation of an integral experience of physical culture. As a result of such organization of the training process, the students formed not an abstract idea about the problem and ways of solving it, but the practical experience of realizing the ways to preserve and strengthen one's own health. The solution of various personally significant and professional problems in the process of training presupposes active inclusion of students in practical health-constructing activity, their acquisition of creative experience in organizing their own sports activities, as well as the formation of professional skills. The results obtained during re-diagnosis on the control stage of the experiment made it possible to confirm the effectiveness of the pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sporting activity. The tendency of positive development of all components of the considered general cultural competencies of students is revealed (Table 1).

### Table 1

<table>
<thead>
<tr>
<th>Components of Development</th>
<th>EG (%)</th>
<th>CG (%)</th>
</tr>
</thead>
</table>

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The tendency of positive development of all components of the considered general cultural competencies of students is revealed (Table 1).
Analyzing the obtained results, it is possible to note the positive dynamics of development of all components of general cultural competencies of the students of the experimental group. Summarizing on the basis of comparative analysis of the obtained results and their mathematical processing with the help of statistical methods, it can be concluded that the implementation of pedagogical conditions for the development of general cultural competencies of students of a pedagogical higher education institution in sporting activity contributes to the development of all components of general cultural competencies, which is reflected in a decrease in the number of students who have the low level and an increase in the number of students who have reached the high level. The results obtained in the course of the experimental work allow concluding that positive changes in the development of the general cultural competencies of students in sporting activity are not due to accidental causes, but are a result of implementation of the pedagogical conditions that we have identified, which is confirmed by the experiment.

5. Conclusions
The general cultural competencies of students of a pedagogical higher education institution in sporting activity should be considered not only as a resource for preservation of their own health, but also in the context of their future pedagogical activity, as well as in the space of social interaction, which contributes to the formation of holistic experience of health-constructing behavior. The development of the considered general cultural competencies in sporting activity is understood as the activity of incorporating the values of health, physical self-development and development of the ability to solve personally important and professional problems on this basis. Sporting activity, organized taking into account the specific features of the development of general cultural competencies of students of a pedagogical higher education institution, fosters the professional self-development of future teachers, their focus on the use of sports activities in solving professional problems.

<table>
<thead>
<tr>
<th>General Cultural Competencies</th>
<th>Levels</th>
<th>Beginning of the Experiment</th>
<th>End of the Experiment</th>
<th>Beginning of the Experiment</th>
<th>End of the Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivational-value component</td>
<td>High</td>
<td>18</td>
<td>46</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>61</td>
<td>45</td>
<td>58</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>21</td>
<td>9</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Cognitive</td>
<td>High</td>
<td>1</td>
<td>23</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>20</td>
<td>65</td>
<td>17</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>79</td>
<td>12</td>
<td>82</td>
<td>39</td>
</tr>
<tr>
<td>Operational-activity</td>
<td>High</td>
<td>12</td>
<td>32</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>18</td>
<td>50</td>
<td>19</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>70</td>
<td>18</td>
<td>69</td>
<td>35</td>
</tr>
<tr>
<td>Evaluative-reflective</td>
<td>High</td>
<td>9</td>
<td>35</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Average</td>
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<td>17</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>71</td>
<td>20</td>
<td>73</td>
<td>41</td>
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</table>
development of the considered general cultural competencies becomes possible in the sporting activity aimed at solving personally important and professional tasks, which ensures students' gaining of holistic experience of activity, as well as its transformation into the experience of solving professional problems.

The purposeful development of general cultural competencies of students of a pedagogical higher education institution in sporting activity presupposes the creation of pedagogical conditions which include the involvement of students in active independent sport activities both in the class and extracurricular time, which contributes to formation of an individual program of personal and professional self-development. The identified criterion – the presence of positive dynamics of development of all components of general cultural competencies in the process of students’ solving personally important problems by means of sporting activity - and the corresponding diagnostic tools allow observing both the positive dynamics of students' readiness to solve personally important tasks and enrich their individual sporting experience, which confirms the effectiveness of pedagogical conditions of development of the considered general cultural competencies.

References


