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## THE EXPERIMENTAL VALIDATION RESULTS OF THE STUDENTS' VALEOLOGICAL COMPETENCE FORMATION MODEL

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# РЕЗУЛЬТАТИ ЕКСПЕРИМЕНТАЛЬНОЇ ПЕРЕВІРКИ МОДЕЛІ ФОРМУВАННЯ ВАЛЕОЛОГІЧНОЇ КОМПЕТЕНТНОСТІ СТУДЕНТІВ

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The article is devoted to the problem of valeological competence formation of pedagogical specialties of non-physical-education profile students. The structure of the valeological competence formation of pedagogical specialties student is laid out. The structural components of the valeological competence of a future teacher are revealed: cognitive, activity-practical, value-motivational, personal. The structural-logical model of the valeological competence formation of future teachers is presented. Its components are characterized in brief.

A comparative analysis of the stating and formational stages results of the pedagogical experiment in the control and experimental groups has been performed. There has been revealed the dynamics of the valeological competence formation levels of pedagogical specialties in accordance with motivational, cognitive and processual criteria. At the completion of the formational stage of the pedagogical experiment the degree of efficiency of the proposed model of the valeological competence formation of students within class studies has been defined.

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**Key words**: valeological competence, model, formation, pedagogical experiment, criteria, results, future teachers.

The topicality of the research. Now at the time of the impetuous health deterioration of the contemporary youth the acute need in this problem's solving on the basis of the use of the educational environment potential arises. The need in the healthy youth upbringing is stated in a number of regulatory documents, in particular, in the National Ukrainian Educational Development Doctrine in the XXI century, Laws of Ukraine "About Education", "About Childhood Protection', Valeological Educational Concept and others. In its turn the upbringing of healthy schoolchildren requires valeological competence formation of future teachers. The presence of the formed valeological competence will allow a teacher to attract students to a healthy way of life, to form their desire to improve personal health. Thus, there arises a necessity in developing and approbation of the model of the valeological competence formation of pedagogical specialties students.

Main publications analysis. The definition of the main point of the valeological competence of students and the developing of the model of its formation was performed on the background of fundamental works on the researched problem, namely by domestic and foreign researchers O. Adjejeva [1], Ju. Bojchuk [2], O. Bondarenko [3], M. Goncharenko [4].

The aim of the article lies in the characteristic of the model of the valeological competence formation of pedagogical specialties students and revealing its efficiency.

The layout of the main material of the article. Grounding on the scientific works analysis of domestic and foreign scholars, namely O. Bondarenko [3], M. Kosheljeva [5], N. Kuz'mina [6], K. Yuryeva [7] and others, there was defined the structure of the valeological competence of a pedagogical specialty student, in which we point out the following components:

- 1) cognitive, the background of which is made up of *valeological knowledge* (concerning saving and improvement of health of their alumni and personal health at a spiritual, social, psychological and physical levels);
- 2) activity-practical, which foresees *valeological abilities and skills* (ability and skills of health improving technologies application in the teaching-educational process with the idea of health saving and health improvement of alumni; abilities and skills of the personal health-improvement application) formation among future teachers;

- 3) value-motivational, the core of which is *the understanding of life's* and health's value (understanding of importance and the need for preservation of personal life and health, the urge towards permanent spiritual development; the direction on formation of axiological thinking in the context among future students);
- 4) personal, which is formed by a complex of meaningful personal qualities of the future teacher, among which the main are *orientation on health-improving activity* (targeting at health making activity in personal and professional aspects; strong beliefs in the necessity of constant self-improvement during life-time as a basis for personal and professional growth and so on).

The solving of the problem of valeological competence formation of students was performed by developing and introducing a relevant model into the educational process (see Figure 1). The efficiency of the process of valeological competence formation of future teachers is provided by clear and well-organized functioning and interaction of all components of the model. As the Figure 1 shows, the structure-functioning model of the valeological competence formation of pedagogical specialties students (non-physical-educational profile) is made up of several highly important components: theoretical-methodological; content; processual; value-resulting. All of them are tightly connected between each other, what makes the model holistic.

A special role is paid to realization of the researched model processual and content. Realization of the content component foresees completion of the content of certain educational disciplines with valeological material, and also the development of relevant facultative courses with orientation on acquiring necessary knowledge by students as for their personal health improvement and upbringing healthy youths in their future professional activity. The realization of the processual component foresees the use of active and interactive forms and methods of education while teaching the facultative course "Become Healthy and Teach Others", developed by us. To such ones we refer: lectures with intentional mistakes, a problem lecture-discussion, a lecture with a certain situation analysis, a seminar with questions and answers, a seminar-training, a seminar-round table, brain storm, a case method, "aquarium", microteaching, problem-creative tasks and so on.

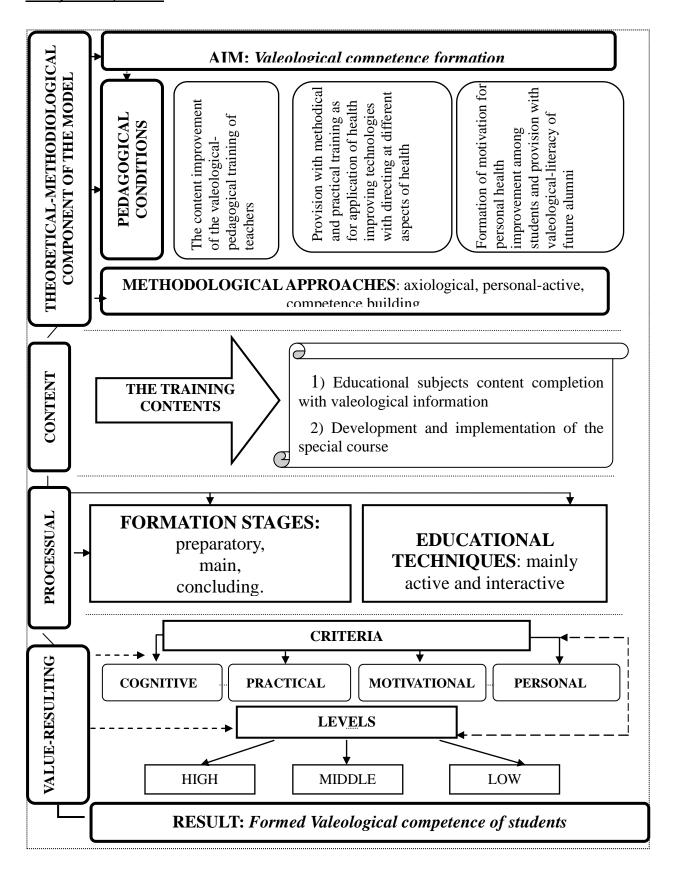


Figure 1. Structural-functional model of valeological competence formation of students

An important concluding task of our research was in the check of the efficiency of the valeological competence formation model of students of pedagogical specialties which we introduced. It was important for us firstly, to research the dynamics of valeological competence formation of future teachers in accordance with the results of experimental realization of the model, secondly, to compare the achieved results in the control and experimental groups.

We shall start with the analysis of the received results in compliance with the **motivational criterion**, which allows defining the formation degree of motivational-value component of valeological competence of future teachers. In the course of the stating stage of the experiment there were not reported any meaningful differences in this criterion of the valeological competence formation of pedagogical specialties students between the control and experimental groups.

On the contrary, at the concluding control stage the factors of the valeological competence formation of students have significantly increased in the experimental group. If at the moment of finishing the formation stage of the experiment the number of students of the control group in which there was settled a low level of motivational-value component of valeological competence formation has decreased by 21.9% (60.1% of students at the stage of initial control, and 38.2% — at the stage of the final control), so in the experimental group reported the decrease by 47.9% which is by 26% higher than the figures of the control group.

Noticeable differences between the results of the both groups are recorded as well as for the formation level of the motivational-value component of valeological competence. So, in the control group the number of future teachers, who acquired a high level decreased only by 3.9% (11,3% of students — initial control, 15.2% — final control), but in the experimental group such increase was by 17.9% (11.2% of students are a stating cut, 29.1% are the concluding cut) which is by 14% more than in the control group.

For convenience we described the results achieved at the initial and concluding stages in the control and experimental groups in the form of a graph (see Figure 2).

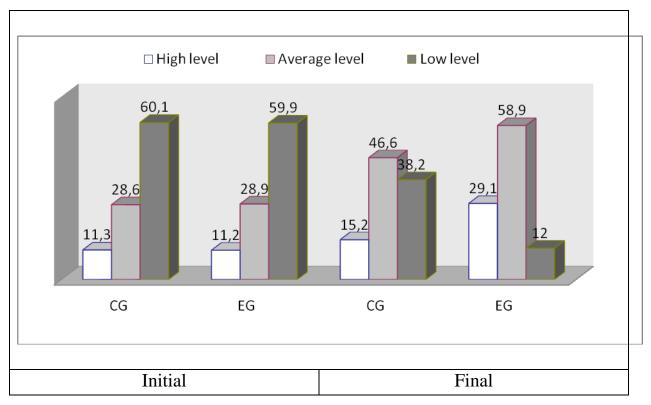


Figure 2. Comparison of formation levels of valeological competence of pedagogical specialties students at the motivation criterion

The estimation of the arithmetical mean of four factors of the cognitive *criterion* allowed defining rather noticeable positive improvements regarding the formation levels of the cognitive component of valeological competence among the students of the experimental group in comparison with the control one. Thus, if the number of control group students, who at the stage of the final control acquired a high level of cognitive component of valeological competence formation, increased by 6.3% (8.8% of students is the stating cut; 15.1% is the final cut) in comparison with the initial control, in the experimental group the increase of the quantity of such students was by 18.3%, which is by 12% higher than in the control group. The more noticeable improvements (in the favour of the experimental group) are also recorded concerning the average formation level of the cognitive component of valeological competence. In the control group the increase in the quantity of respondents who by the moment of the final cut had mastered the necessary knowledge at the average level, was by 15.2% (22.5% of students is the initial control; 37.7% is the final control). In the experimental group the increase of the quantity of such students reached 34.4% of future teachers (22.9% of students is the initial cut; 57.3% is the final cut). In the graph (see Figure 3) it is clearly visible the conclusive advantages of the

experimental group results over control group results and in the context of the reduction of the quantity of pedagogical specialties students, who had a low level of the relevant knowledge acquirement, which characterize the cognitive component of their valeological competence.

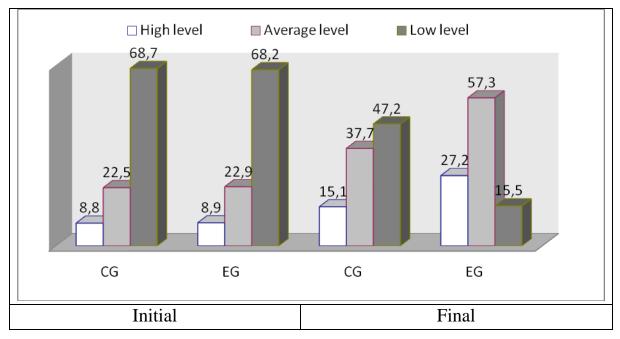


Figure 3. Comparison of formation levels of the valeological competence of pedagogical specialties students according to the cognitive criterion

As it becomes evident from the Figure 3, at the initial control stage the quantity of students, who showed a low formation level of valeological competence in accordance with the cognitive criterion, differed almost to nothing in the control and experimental groups. Instead, at the stage of the final control the difference between groups became considerable. So, if the control group consisted of 47.2% of respondents, who almost did not possess the necessary knowledge concerning personal health improvement and healthy future students, in the experimental group the quantity of such was almost 3 times fewer (15.5%).

Noticeable advantages of the experimental group results over the control group results differ in the *processual criterion* as well visible in the graph (see Figure 4).

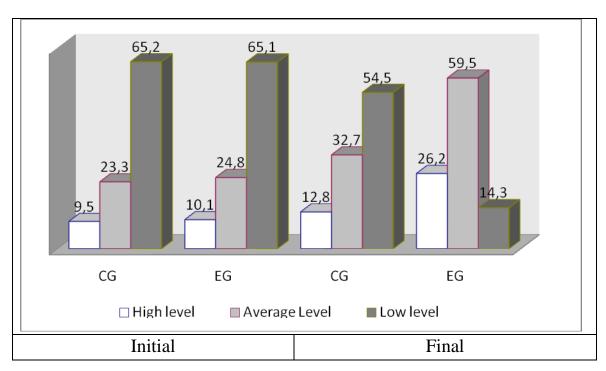


Figure 4. Comparison of formation levels of valeological competence of pedagogical specialties students in accordance with the processual criterion

Thus, according to the achieved results, important advantages of the experimental group results over the control group results convince in the efficiency of the model of valeological competence formation which we have introduced.

Summarizing all said above we can draw the following **conclusions**: 1) each of the valeological competence formation criteria of pedagogical specialties students we established rather noticeable improvements in the experimental group; 2) the biggest range of discrepancy between the results of the control group and the experimental group at the stage final control was observed concerning cognitive and processual criteria of valeological competence formation, which, in its turn, proves the expediency of the development and realization of the corresponding content of the preparation of students, application of efficient (active and interactive) forms and methods of education while teaching it. Thus, the achieved results analysis proves the efficiency of the model of valeological competence formation, which we introduced, among pedagogic specialties students.

**In the further researches** it is planned to investigate possibilities of mastering the health technologies by students in the extra-curricular time.

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### Єлізаров В. П. Результати експериментальної перевірки моделі формування валеологічної компетентності студентів

Стаття присвячена проблемі формування валеологічної компетентності студентів педагогічних спеціальностей не фізкультурного профілю. Подається структура валеологічної компетентності студента педагогічної спеціальності. Розкриваються складники структури валеологічної компетентності майбутнього вчителя: когнітивний, діяльнісно-практичний, ціннісно-мотиваційний, особистісний. Представлено структурно-логічну модель формування валеологічної компетентності майбутніх учителів. Стисло схарактеризовано її компоненти.

Здійснено порівняльний аналіз результатів констатувального та формувального етапів педагогічного експерименту В контрольній та експериментальній групах. Виявлено динаміку рівнів сформованості валеологічної компетентності студентів педагогічних спеціальностей мотиваційним, когнітивним та процесуальним критеріями. По завершенню педагогічного експерименту формувального етапу визначається ефективності запропонованої моделі формування валеологічної компетентності студентів у межах аудиторного навчання.

**Ключові слова:** валеологічна компетентність, модель, формування, педагогічний експеримент, критерії, результат, майбутні учителі.

## Елизаров В. П. Результаты экспериментальной проверки модели формирования валеологической компетентности студентов

Статья посвящена проблеме формирования валеологической компетентности студентов педагогических специальностей не физкультурного профиля. Представлена структура валеологической компетентности студента педагогической специальности. Раскрываются составляющие структуры валеологической компетентности будущего учителя: когнитивная, деятельностно-практическая, ценностно-мотивационная, личностная. Представлена структурно-логическая модель формирования валеологической компетентности будущих учителей. Кратко охарактеризованы её компоненты.

Осуществлён сравнительный анализ результатов констатирующего и формирующего этапов педагогического эксперимента в контрольной и экспериментальной группах. Выявлена динамика уровней сформированности валеологической компетентности студентов педагогических специальностей по мотивационному, когнитивному и процессуальному критериям. По завершении формирующего этапа педагогического эксперимента определяется степень эффективности предложенной модели формирования валеологической компетентности студентов в рамках аудиторного обучения.

**Ключевые слова:** валеологическая компетентность, модель, формирование, педагогический эксперимент, критерий, результат, будущие учителя.

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