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Interrelation of Future Teachers' Health and Their Professional Comfort Zone: Analysis of The Problem

1. Introduction.

The development strategy of the higher education system in Ukraine is formed in accordance with modern integration and globalization processes, allowing its integration into the European and world educational space [6; 9]. There is updating legislation in accordance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) [2]. New social demands put forward new priorities for the transformation of higher education, as that:

- ensuring the availability and continuity of lifelong learning [9];
- ensuring the student-centred approach to learning and teaching, that embracing flexible learning paths and recognising competencies gained outside formal curricula [2, p. 5];
- the development of pedagogical innovations and information and communication technologies [6];

- quality assurance related to learning and teaching in higher education;
- organization of the learning environment and relevant links to research and innovation [2, p. 6];
- improving the social status of pedagogical workers [9] and so on.

Higher education aims to fulfil multiple purposes, such as including preparing students for active citizenship, for their future careers (e.g. contributing to their employability), supporting their personal development, creating a broad advanced knowledge base and stimulating research and innovation [2, p. 6].

In higher pedagogical education transformation occur much faster than in other educational fields. The necessary to provide students with both academic knowledge and skills including those that are transferable, which may influence their personal development and may be applied in their future careers, ensuring that the programmes are delivered in a way that encourages students to take an active role in creating the learning process [2, p. 11], this determines the need for continuing professional development of teachers [1], mastering new competencies [4], modern teaching technologies. Extremely fast development of pedagogical innovations and information and communication technologies requires the teacher's step out from his usual areas of personal and professional comfort and can be a risk factor for both professional and individual teacher's health in General.

Any person tries to be in his comfort zone. Expansion or contraction of the usual comfort zone may indicate the presence of the transition state, which causes the stress reaction in the body [3; 7; 10]. Sustainable narrowing of the comfort zone indicates a prolonged stressful situation and reduction of the personal manifestations of man in a specific field of activity. Expanding the comfort zone is an indicator of personality development, the inclusion of new activities, and the presence of processes of adaptation or readaptation (in the case of a narrowing comfort zone that preceded its expansion). Important in the dynamics of indicators of the comfort zone is the result of consolidation after its expansion and return at least to the initial level after a temporary narrowing.

The purpose of the research is to establish the relationship between the professional comfort zone of students future teachers, their health and educational achievement.

2. Methods

2.1. Participants

293 students of the pedagogical University participated in this study. They were divided into experimental and control groups. The number of students in the experimental groups was 61, in the control – 232 persons. All the students were in the same level of education (from 1st to 5th year). The observations were made in each year of study four times a year. The students, who quit the University for whatever reasons at different stages of education, were excluded from the research groups. This allowed us to monitor all the indicators at all stages of the period of future teachers' professional training.

2.2. Procedure

The study was conducted during two five-year terms of professional training of students from 2005 to 2010 and from 2010 to 2015.

The dynamics of the professional comfort zone and self-assessment of students' health status were registered at the beginning of the 1st year of study, during exam sessions twice a year and during the intersession period. The indicators of educational achievement were monitored according to the log achievements of students' progress of the faculty.

The experimental and control groups were taught by the same curriculum. Health preservation technologies were applied in the experimental groups in the classroom and in extracurricular work. These technologies were aimed at increasing physical activity during the lectures, implementation of exercises for the prevention of violations of posture, the development of a respiratory and cardiovascular system, eliminating fatigue, reducing eye strain etc. There were conducted training with the students that contributed to adapting them to the learning environment at the university, encouraged the development of educational competencies, future teachers' secondary vocational guidance, the prevention of premature professional burnout etc.

For some students if they appeal psychovaleological advising was conducted regarding their adaptation to the learning environment, future professional activity and professional development, to resolve their interpersonal conflicts, with the aim of individual and professional health preserving. The psychovaleological advising was carried out using the author's technique of projection desensitization, which is described in details here [4].

Therefore, it was formed the individual health preservation competence of students in experimental groups; a part of this competence was the formation of a teacher's professional health.

2.3 Measures

The future teachers' professional comfort zone diagnostics carried out by the method of V. Darov [8] (Fig.1.), adapted taking into account the recommendations of M. Taylor [3] to measuring the professional comfort zone.

Students were asked to evaluate eight parameters of their comfort zone in each monitoring period using a 10-point scale. Such parameters were: health, family, learning, money, communication, self-development, rest, and hobby.

The test pointed each parameter on the graph. Then the points on the axes were connected with line segments. The resulting figure is interpreted as the individual comfort zone; its area was calculated for each respondent and for the group as a whole. An example of assignments is presented in Fig.1.

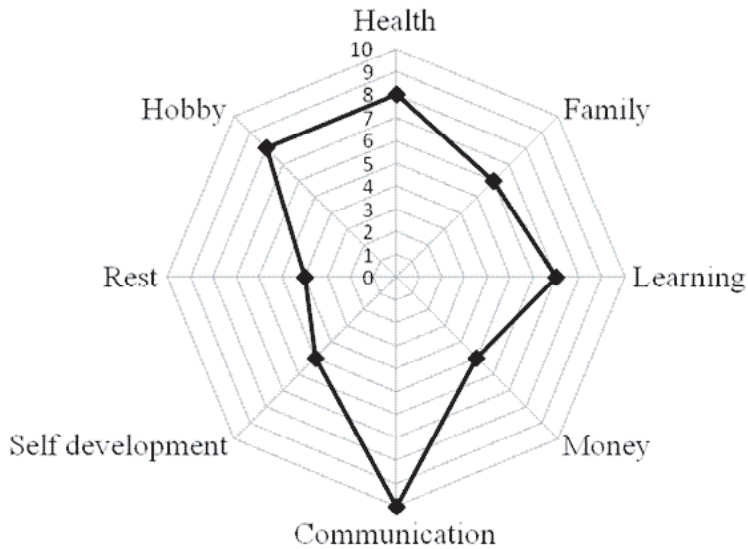


Fig 1. An example of students' comforts zone representation

3. Statistical analyses

The calculations of the comfort zone square, processing of statistical data, including graphical analysis of data, were carried out using GRAN1

software (authors M. Zhaldak, Yu. Goroshko).

To confirm the reliability of the experimental data it was used correlation analysis. It allowed to determine the degree of correlation between the level of health of students and indicators of their comfort zone; and dependence of educational achievement of the level of health as well. To assess the correlation it was used the Bravais-Pearson correlation coefficient r . All statistics are considered significant for a probability level less than $p = 0.05$.

4. Results and Discussion

The dynamics of the comfort zone indicators changes of students – future teachers can be divided into several stages.

Stage 1 characterizes the initial level of the comfort zone. As a rule, this indicator is the value of the comfort zone before entering the University, i.e. the familiar conditions for the student-applicant.

Stage 2 starts at the time of the change of social status from school student to student, i.e. at the time of admission to the University. It is characterized by the rethinking of the personality of his social experience, future prospects development, intrapersonal restructuring of values, priorities, directions of further development, and a change of social circle. Observations show that there can be as expanding as narrowing students' comfort zone at this stage.

Stage 3 is a very responsible in student life. This is the first session that requires mental stress and physical strength, sustained concentration on learning as the core business, the establishment of hierarchical relationships between students and teachers. An important in this period is the students' ability to properly organize their daily routine, work time, life, rest, etc. to reduce the stress load on the body.

Stage 4 is the diagnostic from the point of view of the comfort zone dynamics. The indicators for the diagnostic are the comparison of the comfort zone after the 1st session in the beginning of the 2nd semester of the first year with the three previous indicators, i.e., data of the three previous stages.

If comfort zone decreased by stage 3 and not resumed at stage 4, it is possible to speak of the process of disadaptation and absence of health preservation influence of educational environment for the student body. When the comfort zone returns to the previous indicators we can talk about adaptation and the existence of satisfactory health preservation influence of the educational environment (Fig.2.).

As can be seen from Fig. 2, the beginning of study at the University

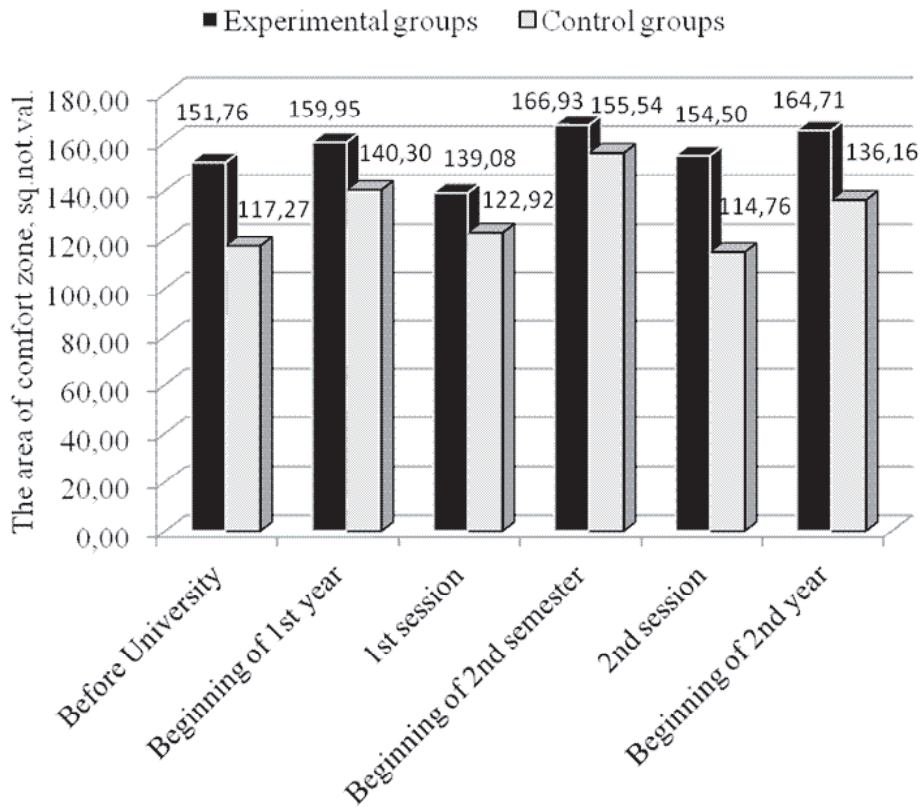


Fig 2. The comfort zone indicators dynamics during the first year of study

was accompanied by the extension of the comfort zone (accordingly by 8.19 and 23.03 sq. units) both in experimental and in control groups due to the increase in weight of learning, expansion of communication and communication with the family. In periods of examination sessions, it was observed a regular decrease the comfort zone in both groups, mainly by reducing the amount of time spent on leisure, hobbies and family. However, experimental groups showed returning of the comfort zone indicators to the previous in the intersessional periods. In control groups the indicators of the comfort zone back to the previous one only after the first session. In further observation during the 5-year training period, this trend continued.

The average health status throughout the study period in the experimental groups was 7.65 ± 0.60 units and 7.25 ± 0.29 units in the control ones. The average comfort zone indicators in the experimental and control groups were accordingly 175.26 ± 16.05 and 133.11 ± 17.38 sq. units. (Fig. 3).

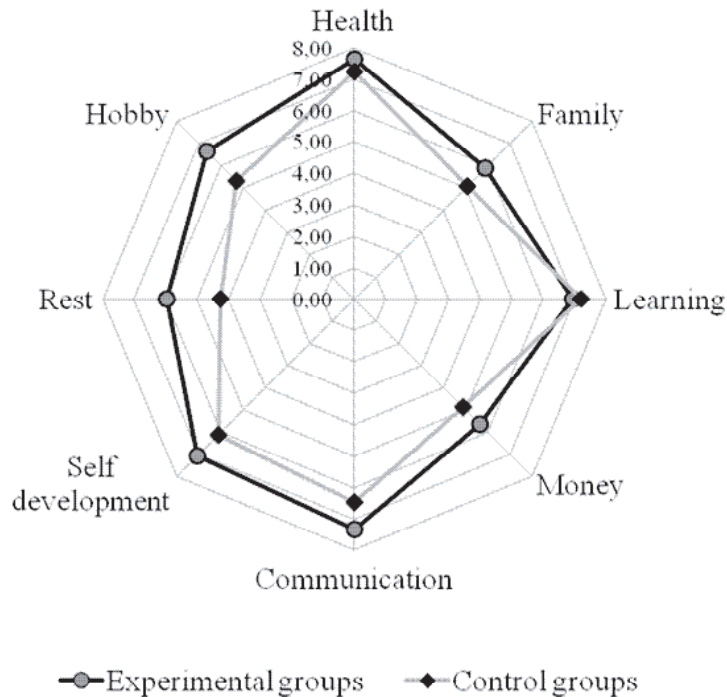


Fig 3. Average indicators of future teachers' comfort zone

The average indicators of educational achievement were 4.05 ± 0.48 marks (according to national 5-mark scale), for the experimental groups and 3.67 ± 0.65 marks for the control groups. In terms of ECTS marks, it is accordingly 81 ± 9.6 marks and 73.4 ± 13 marks.

The analysis of received data showed a significant relationship between indicators of the students future teachers comfort zone, their health status and educational achievement in the experimental groups. There wasn't statistically significant relationship between these indicators in the control groups.

In the experimental groups, a significant relationship was marked between the health status of students and their professional comfort zone ($r = 0.851$). In the control groups the relationship of these indicators is weak ($r = 0.438$). The experimental indicators are significant ($p = 0.05$, $r > r_p$, $r_{0.05} = 0.124$). Therefore, in the experimental groups it is improving the state of students' health, and at the same time, their professional comfort zone is expanding because of the implementation of health preservation pedagogical interventions and students' receiving of individual health care competence. In the control groups, such dynamics is weak.

Significant positive correlation is observed between the health status of students of experimental groups and their educational achievement ($r = 0.896$, $p = 0.05$). At the same time in the control groups manifested a weak negative relationship ($r = -0.319$, $p = 0.05$). This suggests that experimental groups' students' learning progress did not significantly reduce their health, so there was an expected health preservation effect. In control groups, the need for successful learning is accompanied by the stress of adaptation mechanisms and leads to lower the level of health.

The correlation between the professional comfort zone of students and their educational achievement in the experimental groups is $r = 0.620$, in control groups – $r = 0.393$ (indicators reliable at significance level $p = 0.05$). This suggests that the indicators of an educational achievement in addition to expanding the comfort zone are also influenced by other factors. They may be intellectual abilities of students, the peculiarities of their nervous system, motivation to learn academic disciplines etc.

81.3 % of students of experimental groups continued their studies at the master's programme, students of the control groups – only 33.7 %. In General, the students of experimental groups showed the facilitated adaptation to pedagogical activity on pedagogical practice and the introduction in the first year of professional activity.

5. Conclusion.

Modern conditions require the preparation of a teacher who could adapt to the new needs of society without damage his own health. Professional health of the teacher is a subsystem in the system of his individual health.

It was found that in the implementation of health preservation pedagogical interventions and students' receiving of competence of individual health care it is improving the state of their health, and at the same time, their professional comfort zone is expanding.

The expansion of professional comfort zone can be considered as the

basis for ensuring quality education and as a prerequisite for the formation of individual health preservation competence of the future teacher.

Some students who initially have a much-narrowed comfort zone require special attention. This phenomenon is observed in the case of congenital or acquired defects that are personally meaningful to the student. For example, the average indicator of the professional comfort zone of student T., who has a very high level of stuttering (speech defects), is 40 sq. units compared to the average values of the group 154.19 ± 16.72 sq. units.

References

1. Avalos B. Teacher professional development in Teaching and Teacher Education over ten years / Beatrice Avalos // *Teaching and Teacher Education*. – 2011. – № 1 (27). – С. 10–20.
2. Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). – K.: CS Ltd., 2015. – 32 p.
3. Taylor M. How to Expand Your Comfort Zone [Електронний ресурс] / M. Taylor. – Режим доступу : <http://expertenough.com/2059/comfort-zone>.
4. Wisniewska Ewa. Kompetencje nauczyciela we wspolczesnych warunkach pracy / Ewa Wisniewska // *Гуманітарний вісник ДВНЗ “Переяслав-Хмельницький державний педагогічний університет імені Григорія Сковороди”*. Педагогіка. Психологія. Філософія : збірник наук. праць. Вип. 28. Т. 1 / МОНМС України, Переяслав-Хмельницький держ. пед. ун-т ім. Г. Сковороди ; голов. ред. В. П. Коцур. – Переяслав-Хмельницький, 2013. – 410 с. – С. 75-80.
5. Жарая А. И. Сохранение профессионального здоровья будущих учителей в процессе индивидуального психовалеологического консультирования / А. И. Жарая // *Здоровье для всех: сборник статей V Международной научно-практической конференции, УО “Полесский государственный университет”, г. Пинск, 25-26 апреля 2013 г.; редкол.: К. К. Шебеко [и др.]. – Пинск : ПолесГУ, 2013. – 273 с. – С. 171–173.*
6. Закон України “Про вищу освіту” Закон від 01.07.2014 № 1556-VII // *Відомості Верховної Ради (ВВР) – 2014 – № 37-38. – с. 2004.*
7. Зона комфорта – правда и мифология [Електронний ресурс]. – Режим доступу : <http://darov.net/azbuka-razvitiy/zona-komforta.html>
8. Колесо жизни – инструменты системы [Електронний ресурс]. – Режим доступу: <http://darov.net/azbuka-razvitiy/koleso-zhizni-instrumenty-sistemy.html>
9. Національна стратегія розвитку освіти в Україні на 2012–2021 роки : Схвалено Указом Президента України від 25 червня 2013 року №344/2013 [Електронний ресурс]. – Режим доступу : <http://zakon3.rada.gov.ua/laws/show/344/2013#n10>.

10. Трейси Б. Выйди из зоны комфорта. Измени свою жизнь. 21 метод повышения личной эффективности / Брайан Трейси ; пер. с англ. Марины Сухановой. – М. : Манн, Иванов и Фербер, 2014. – 144 с.

Translation of References

1. Avalos B. Teacher professional development in Teaching and Teacher Education over ten years / Beatrice Avalos // Teaching and Teacher Education. –2011. – № 1 (27). – С. 10–20.
2. Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). – K.: CS Ltd., 2015. – 32 p.
3. Taylor M. How to Expand Your Comfort Zone [electronic resource]. / Marcus Taylor. – Access mode : <http://expertenough.com/2059/comfort-zone>.
4. Wisniewska Ewa. The competence of the teacher in modern conditions / Ewa Wisniewska // Humanitarian Bulletin of the SHEI “Perejaslav-Khmelnytsky State Pedagogical University”. Pedagogy. Psychology. Philosophy: a collection of science works. Vol. 28. T. 1 / M. of EYS of Ukraine, Pereyaslav-Khmelnytsky State ped. University of H. Skovoroda; head Ed. V.P. Kotsur. – Pereyaslav-Khmelnytsky, 2013. – 410 p. – P. 75-80.
5. Zhara H.I. Future teachers’ professional health saving in the process of an individual psycho-valeological consultancy / H.I. Zhara // Health for all: a collection of articles V International scientific and practical conference, E.I. “Polesky State University”, Pinsk, 25-26 April 2013; Editorial Board : K. Shebeko [et al.]. – Pinsk: PSU, 2013. – 273 p. – P. 171-173.
6. Law of Ukraine “On Higher Education” Act of 01.07.2014 № 1556-VII // Supreme Council (BD) – 2014. – № 37-38. – p. 2004.
7. Comfort zone – the truth and Mythology [electronic resource]. – Access mode : <http://darov.net/azbuka-razvityi/zona-komforta.html>
8. The Wheel of Life - System Tools [Electron resource]. - Access mode: <http://darov.net/azbuka-razvityi/koleso-zhizni-instrumenty-sistemy.html>
9. The National Strategy for the Development of Education in Ukraine in 2012-2021: Approved Decree of the President of Ukraine on June 25, 2013 №344 / 2013 [electronic resource]. – Access mode : <http://zakon3.rada.gov.ua/laws/show/344/2013#n10>.
10. Tracy B. Eat That Frog!: 21 Great Ways to Stop Procrastinating and Get More Done in Less Time: Easyread Edition / Brian Tracy. – ReadHowYouWant.com, 13 Nov. 2008. – 148 p.

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Abstracts

ANNA ŻARA. Współzależność zdrowia przyszłych nauczycieli i ich strefy komfortu zawodowego: analiza problemu. W artykule przedstawiono dynamikę zmian strefy komfortu zawodowego przyszłych nauczycieli w procesie przygotowania zawodowego oraz jej związek z dynamiką ich stanu zdrowia. Ustalono, że zachowanie zdrowia w warunkach oddziaływania pedagogicznego oraz nabycie przez studentów indywidualnych kompetencji zachowania zdrowia przyczyniają się do poprawienia stanu zdrowia nauczyciela, a jednocześnie rozszerza się strefa ich komfortu zawodowego. Stwierdzono, że rozszerzenie strefy komfortu zawodowego może być traktowane jako podstawa do edukacji o wysokiej jakości, a także jako warunek do kształtowania kompetentności indywidualnego zachowania zdrowia przyszłego nauczyciela.

Słowa kluczowe: przyszli nauczycieli, zdrowie, strefa komfortu zawodowego, kompetentność indywidualnego zachowania zdrowia, rozwój zawodowy.

ГАННА ЖАРА. Взаємозв'язок здоров'я майбутніх учителів та їх зони професійного комфорту: аналіз проблеми. Трансформація сучасної освіти, пов'язана з інтеграцією України до європейського освітнього простору, висуває нові вимоги до підготовки майбутніх учителів. Оновлене законодавство про вищу освіту ставить пріоритетним розвиток освіти протягом усього життя. У педагогічній освіті це зумовлює необхідність неперервного професійного розвитку вчителя, оволодіння ним новими компетенціями, сучасними технологіями навчання. Надзвичайно швидкий розвиток педагогічних інновацій та інфор-

маційно-комунікаційних технологій потребує виходу вчителя зі звичної для нього зони професійного та особистісного комфорту і може стати чинником ризику як для професійного, так і для індивідуального здоров'я вчителя в цілому. Професійне здоров'я вчителя є підсистемою в системі його індивідуального здоров'я. У статті розглянуто динаміку змін зони професійного комфорту майбутніх учителів у процесі професійної підготовки та її взаємозв'язок з динамікою їх стану здоров'я. З'ясовано, що при здійсненні здоров'язберезувального педагогічного впливу і набутті студентами компетентності індивідуального здоров'язбереження відбувається покращення стану їх здоров'я, і водночас розширюється зона професійного комфорту. У досліджуваного контингенту спостерігається зростання якості навчання, полегшена адаптація до педагогічної діяльності під час педагогічної практики та інтродукції у перший рік професійної діяльності. Таким чином, розширення зони професійного комфорту може розглядатись як основа для забезпечення якісної освіти, а також як передумова для формування компетентності індивідуального здоров'язбереження майбутнього вчителя.

Ключові слова: майбутні учителі, здоров'я, зона професійного комфорту, компетентність індивідуального здоров'язбереження, професійний розвиток.

АННА ЖАРАЯ. Взаимосвязь здоровья будущих учителей и их зоны профессионального комфорта: анализ проблемы. Трансформация современного образования, связанная с интеграцией Украины в европейское образовательное пространство, выдвигает новые требования к подготовке будущих учителей. Обновленное законодательство о высшем образовании ставит приоритетом развитие образования в течение всей жизни. В педагогическом образовании это вызывает необходимость непрерывного профессионального развития учителя, овладения им новыми компетенциями, современными технологиями обучения. Чрезвычайно быстрое развитие педагогических инноваций и информационно-коммуникационных технологий требует выхода учителя из привычной для него зоны профессионального и личного комфорта и может стать фактором риска, как для профессионального, так и для индивидуального здоровья учителя в целом. Профессиональное здоровье учителя является подсистемой в системе его индивидуального здоровья. В статье рас-

смотрена динамика изменений зоны профессионального комфорта будущих учителей в процессе профессиональной подготовки и ее взаимосвязь с динамикой их состояния здоровья. Установлено, что при осуществлении здоровьесберегающего педагогического воздействия и приобретении студентами компетентности индивидуального здоровьесбережения происходит улучшение состояния их здоровья, и одновременно расширяется зона профессионального комфорта. У исследуемого контингента наблюдается рост качества обучения, облегченная адаптация к педагогической деятельности во время педагогической практики и интродукции в первый год профессиональной деятельности. Таким образом, расширение зоны профессионального комфорта может рассматриваться как основа для обеспечения качественного образования, а также как предпосылка для формирования компетентности индивидуального здоровьесбережения будущего учителя.

Ключевые слова: будущие учителя, здоровье, зона профессионального комфорта, компетентность индивидуального здоровьесбережения, профессиональное развитие.

HANNA ZHARA. Nterrelation of future teachers' health and their professional comfort zone: analysis of the problem. *The transformation of the modern education associated with the integration of Ukraine into the European educational space, placing new demands on the preparation of future teachers. The updated law on higher education sets the priority development of education throughout life. In teacher education, this determines the need for continuing professional development of teachers, mastering new competencies, modern teaching technologies. Extremely fast development of pedagogical innovations and information and communication technologies requires the teacher's step out from his usual areas of personal and professional comfort and can be a risk factor for both professional and individual teacher's health in General. The professional health of the teacher is a subsystem in the system of his individual health. The article considers dynamics of changes of the professional comfort zone of future teachers in the process of professional training and its interrelation with the dynamics of their health status. It was found that in the implementation of health preservation pedagogical interventions and students' receiving of competence of individual health care it is improving the state of their health, and at the same time, their professional comfort zone is expanding. In the studied contingent the rise of educational quality, the*

facilitated adaptation to pedagogical activity on pedagogical practice and the introduction in the first year of professional activity are observed. Thus, the expansion of professional comfort zone can be considered as the basis for ensuring quality education and as a prerequisite for the formation of individual health preservation competence of the future teacher.

Key words: *future teachers, health, professional comfort zone, individual health preservation competence, professional development.*