
THE USE OF PSYCHOLOGICAL AND PSYCHIATRIC METHODS IN DETERMINING VALEOLOGICAL COMPETENCE FORMATION IN NON-MEDICAL STUDENTS OF UKRAINE

*Shevchenko A.S.¹⁻³, Tolstaia T.Yu.², Shtefan L.V.³,
Shevchenko V.V.⁴, Kucherenko S.M.⁵, Kucherenko N.S.³*

¹Kharkiv Regional Institute of Public Health Services, Kharkiv, Ukraine

²Kharkiv National Medical University, Kharkiv, Ukraine

³Ukrainian Engineering Pedagogics Academy, Kharkiv, Ukraine

⁴National Technical University "Kharkiv Polytechnic Institute", Kharkiv, Ukraine

⁵National University of Civil Defense of Ukraine, Kharkiv, Ukraine

<https://doi.org/10.35339/ic.10.2.sts>

ABSTRACT

Background. Valeological competence is the ability to lead a healthy lifestyle. Teaching the basics of a healthy lifestyle in higher education institutions of Ukraine is regulated by higher education standards. Valeological competence is formed in non-medical students during the teaching of valeological disciplines. At the Ukrainian Engineering Pedagogics Academy (Kharkiv) such a valeological discipline is "Health Pedagogy", at the National Technical University "Kharkiv Polytechnic Institute" (Kharkiv) and at the National University of Civil Defense of Ukraine (Kharkiv) – "Fundamentals of Medical Knowledge and Health-Saving". Confidential questionnaires are used to assess the success of the formation of the motivational-value and personal components of valeological competence, the list of questions of which allows studying the behavior patterns of non-medical students.

Aim. To establish the conformity of the questions of the questionnaires, which are used to study the formation of the motivational-value and personal components of the valeological competence in non-medical students, to the existing psychological and psychiatric methods.

Materials and Methods. The bibliosemantic method and the system analysis method were used in the study.

Results. Correspondence was established between the questions used to assess the success of the formation of the motivational, value and personal components of valeological competence, with the questions of such psychological and psychiatric methods questionnaires by Rogers K. and Diamond R. (social-psychological adaptation), Boyko V.V. (level of emotional burnout), Burtyanskyi D.L. and Krystal V.V. (levels of socio-pedagogical and sexual-behavioral adaptation of a married couple or sexual partners), Navran L. (satisfaction with married life or life with a sexual partner) and the CAGE-AID screening test for alcohol and/or drug addiction.

Conclusions. The questions of the questionnaires used for assess the success of the formation of the motivational-value and personal components of valeological competence in non-medical students, correspond to existing psychological and psychiatric methods, the modification of which to the needs of assessing the formation of the components of valeological competence requires further research.

Keywords: *qualitative factor-criterion model, health-saving, valeological education.*

Corresponding Author:

Shevchenko Alexander – MD, Master of Medicine,
Pedagogy & Economics, Director of the Kharkiv
Regional Institute of Public Health Services
Address: Ukraine, 61057, Kharkiv, Rymarska str., 8,
KhRIPHS.
E-mail: al.shevchenko1976@gmail.com

Introduction

The importance of health care cannot be doubted. Disease prevention is a priority direction of the state policy of Ukraine and takes place with the participation of medical workers, civil servants, mass media, professional medical and social non-governmental organizations, and teachers.

However, doctors mostly put effort into secondary and tertiary prevention, because they communicate mainly with citizens who already have the disease. The primary prevention of diseases at the system level is carried out precisely in the institutions of the education system [1–3].

The tool for healthy lifestyle forming in the education system is valeological disciplines, which form the valeological competence of students and establish a commitment to safe behavior and a healthy lifestyle for the entire future life. Teaching the basics of a healthy lifestyle in higher education institutions of Ukraine is regulated by higher education standards. However, each institution of higher education independently chooses the disciplines through which valeological competence will be formed. In the Ukrainian Engineering Pedagogics Academy (Kharkiv) it is "Health Pedagogy", in the National Technical University "Kharkiv Polytechnic Institute" (Kharkiv) and the National University of Civil Defense of Ukraine (Kharkiv) – "Fundamentals of Medical Knowledge and Health-Saving" [4; 5].

The creation of new valeological disciplines for non-medical students conveys a wealth of simple medical information from medical disciplines. First for everything, Anatomy, Physiology and Hygiene. Simplification of information will require special methods of balancing, scaling and aggregation [6–9], which allow one to condense the enormous number of complex terms without losing the integrity of the information, logics and interconnections between themes of discipline, violation of the principles of evidence-based medicine [10–13].

When creating programs of new valeological disciplines, the need to develop competencies provided for by national education standards is taken into account [3; 14–20], as well as the principle of adaptability [21; 22], thanks to which it is simplified to supplement the discipline with information about new achievements in the theory and practice of health care, to build individual educational trajectories of students and to transition to new forms of education (distance synchronous, mixed distance-auditory). Requirements for adaptability, the framework of the competence approach, the transition to learning according to the Bologna model [23; 24] have a significant impact on the system of evaluating students' success in forming the necessary competencies, including valeological. But our research shows that the issue of competence assessment has not been studied enough [25; 26]. In particular, this refers to the comprehensive as-

essment of non-cognitive components related to motivation and the value system, and not to the triad of "knowledge-ability-skills".

To assess the success of the formation of motivational, value and personal components of valeological competence when teaching the discipline "Health Pedagogy", we use the qualitative model of competence formation [27; 28] and confidential questionnaires, the questions of which make it possible to study the behavior patterns of education seekers, the dynamics of their changes, and ultimately to conclude on the success of achieving the goal of forming valeological competence for leading a healthy lifestyle and health care [26–28]. However, in accordance with modern requirements for the verification of psychological and pedagogical methods used in the pedagogical process [19; 29], it is necessary to verify the effectiveness of the scales used to assess the formation of motivation and values.

The **purpose** of the study is to establish the correspondence of the questions of the questionnaires, which are used to study the formation of the motivational-value and personal components of the valeological competence of the non-medical students to the existing psychological and psychiatric methods.

Materials and Methods

The bibliosemantic, comparative method and the system analysis method were used in the study [30]. The search for methods of evaluating motivation and values, as well as activities based on the life principles of mentally healthy people, was performed in the Google Scholar and PubMed scientific databases. The choice of methods for comparison was based on the principles of realism, flexibility, confidentiality and evidence [31; 32].

Results and Discussion

The programs of valeological disciplines "Fundamentals of Medical Knowledge and Health-Saving" and "Health Pedagogy" consist of 14 identical topics [6; 26], but differ in the additional psychological and pedagogical block (didactics, motivation for maintaining health, activation of cognitive activity for the formation of valeological competence, control of valeological competence formation, feedback) in the last one.

In the program of disciplines "Health Pedagogy" [5; 33] and "Fundamentals of Medical Knowledge and Health-Saving" there is a topic about mental and psychological health, within which issues of mental health, mental diseases, borderline states, psychological balance, stress resistance, logical and emotional intelligence, men-

tal and psychological development of a person in connection with age. The program also includes separate issues of neuro-linguistic programming (in particular, techniques for transforming negative emotions into neutral and positive ones, representative systems, diagnostics and getting out of the Karpman triangle, etc.) [34; 35]. Working with one's own emotions involves observing one's own feelings, studying one's own behavior patterns, psychological roles, habits, thoughts, and motivations. The connection between discipline materials, exercises and control questions with Between the discipline material and the method of diagnosis of socio-psychological adaptation by K. Rogers and R. Diamond [36], a self-diagnostic questionnaire with a survey scale and a rating of answers from 0 ("this does not concern me at all") to 6 ("it's definitely about me"). The results of the survey indicate the possibility of adaptation to a new environment, circumstances, rules of conduct, etc. The rating scale for responses to 101 depersonalized statements assesses adaptability, lying, acceptance of self and others, emotional comfort, internal and external control, dominance, and escapism. In the self-diagnosis of one's own psychological state and the risks of psychological adaptation disruptions within the valeological disciplines [37], the restoration of psychological comfort and balance, self-assessment of the effectiveness of psychological relief and increased stress resistance are especially important, which confirms a significant similarity with the methodology of K. Rogers and R. Diamond.

Questions for students in the courses of valeological disciplines on professional burnout correspond to the method of diagnosing the level of emotional burnout by Boyko V.V. (1996) [38; 39], who considered this process "a mechanism of psychological protection in the form of complete or partial exclusion of emotions in response to psychotraumatic influences". Burnout is accompanied by "emotional exhaustion, a decrease in the level of professional activity, dissatisfaction with the activity, as well as an inadequate assessment of one's professional capabilities". A person who is burning out goes through the stages of "tension", "resistance" and "exhaustion". For diagnosis or self-diagnosis, it is necessary to read 84 judgments and answer "yes" or "no" to each of them. Finding someone who is burning out is in the "tension" stage is evidenced by such signs as experiencing psycho-traumatic circumstances, dissatisfaction with oneself, the feeling of being "caged", anxiety and depression. About being in

the stage of "resistance" – inadequate emotional response, emotional and moral disorientation, expansion of the sphere of economy of emotions and reduction of professional duties. About being in the stage of "exhaustion" – emotional deficit, emotional detachment, personal detachment (depersonalization), psychosomatic and psychovegetative disorders. The task of a teacher of valeological disciplines is to teach students of higher non-medical education the principle of self-diagnosis of emotional burnout and to determine the moment when a burned-out person should seek specialized medical or psychological help [40–42].

A significant number of questions on the topic of sex education and family planning, which the teacher of the valeological discipline must ask the students when they complete their independent tasks, are confidential, because they concern their sex life, personal health, the health of a sexual partner or partners. To determine the progress in the formation of valeological competence, the teacher needs frank and honest answers. They can be obtained only under the condition of a guarantee of confidentiality and the student's trust in these guarantees [31]. Questions about sexual practices complement well questions about the attitude of sexual partners to each other, the harmony of marital relations. These questions overlap with the methodology of the questionnaire by Burtyanskyi D.L. and Krystal V.V. (1982) regarding the levels of socio-pedagogical and sexual-behavioral adaptation of a married couple [43–48]. Answers to the 17 questions of the questionnaire are evaluated on a scale from +2 to –2, in which +2 means complete psychological adaptation and sexual harmony, 0 – the absence of any meaning of adaptation and harmony, –2 – psychological maladjustment and sexual disharmony. Additional conclusions about satisfaction with married life or life with a sexual partner can be made using a questionnaire Navran L. (1967) [43; 49] about communication skills. Answers to 25 questions of the questionnaire about non-verbal communication of partners are evaluated on a scale from 1 (if the answer is "never") to 5 (if the answer is "very often"). Based on the results of the survey, it is possible to determine how happy a husband and wife are in marriage, and how happy sexual partners are in a relationship.

High confidentiality requirements also apply to questions of chemical dependency. Especially about the use of drugs, which, unlike alcohol and tobacco, are not legal. Of the large number of existing questionnaires for such questions to determi-

ne the risks of chemical addictions, in our opinion, the majority of overlaps in questions are present in the Screening test for the diagnosis of alcohol and/or drug addiction (Cut, Annoyed, Guilty, Eye-opener, CAGE-AID) [50]. Similar tests with fewer questions are used during visits to doctors when alcohol and drug problems are first detected. In cases of a positive CAGE-AID test (2 or more positive answers to the questions of the questionnaire), the valeological discipline teacher should privately recommend that the student seek professional help from a narcologist.

Conclusions

The questions of the questionnaires offered to those seeking higher education, which are used to assess the success of the formation of the motivational-value and personal components of valeological competence, correspond to existing psychological and psychiatric methods, the modification of which to the needs of assessing the formation of the components of valeological competence requires further research. But it is the study of the motivational, value and personal components of competence that allows the teacher of the valeological discipline to diagnose dangerous conditions for the student's health and to provide recommendations for seeking professional medical or psychological help.

As a result of the research, we established the correspondence of the questions used in the study of the formation of valeological competence of non-medical students with the questions of questionnaires by Rogers K. and Diamond R. (social-psychological adaptation), Boyko V.V. (level of emotional burnout), Burtyanskyi D.L. and Krystal V.V. (levels of socio-pedagogical and sexual-behavioral adaptation of a married couple or sexual partners), Navran L. (satisfaction with married life or life with a sexual partner) and the CAGE-AID screening test for alcohol and/or drug addiction.

DECLARATIONS:

Disclosure Statement

The authors have no potential conflicts of interest to disclosure, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

Data Transparency

The data can be requested from the authors.

Statement of Ethics

The authors have no ethical conflicts to disclose.

Funding Sources

There are no external sources of funding.

Consent for publication

All authors give their consent to publication.

Received: 11 Sep 2023

Accepted: 26 Oct 2023

References

1. Heera HS, Najar SSH, Shevchenko AS, Lytvynenko OYu. Valeological relationship of physical workability with health indicators. *Inter Collegas*. 2023;10(1):33-6. DOI: 10.35339/ic.10.1.hns.
2. Blahyi O. Experimental research of the effectiveness of health-saving competence development of future food processing engineers. *Oleksandr Dovzhenko Hlukhiv National Pedagogical University Bulletin. Series: Pedagogical Sciences*. 2023;51:150-7. DOI: 10.31376/2410-0897-2023-1-51-150-157.
3. Shevchenko AS, Shtefan LV. Formation of valeological competence in non-medical students. *Engineering and Educational Technologies*. 2021;9(4):8-23. DOI: 10.5281/zenodo.5812883.
4. Shevchenko A, Kucherenko S, Komyshan A, Shevchenko V, Kucherenko N. Formation of valeological competence in conditions of classroom and distance learning. *Scientific notes of the pedagogical department*. 2022;50(1):137-47. DOI: 10.26565/2074-8167-2022-50-14.
5. Shtefan LV, Shevchenko AS. Materials of academic discipline "Health Pedagogy": lectures, guidelines for practical classes, extracurricular activities, presentations; for applicants for higher education degree "master" full-time and part-time educational forms for the specialty 011 "Educational, pedagogical sciences". Kharkiv: Ukrainian Engineering Pedagogics Academy, 2021. 5 vol. DOI: 10.5281/zenodo.7013951 [in Ukrainian].
6. Kovalenko D, Shevchenko A, Koeberlein-Kerler J, Shtefan L, Kovalska V. Didactic Adaptation of Medical Information for the Formation of Valeological Competence in Engineering and Pedagogical Training. In: Auer ME, Pachatz W, Rüttemann T (eds). *Learning in the Age of Digital and Green Transition. ICL 2022*, vol. 2. *Lecture Notes in Networks and Systems*, vol. 634, p. 310-8. Springer, Cham. DOI: 10.1007/978-3-031-26190-9_32.
7. Andrews GR. *Foundations of Multithreaded, Parallel, and Distributed Programming*. London: Pearson Education (Addison-Wesley); 2000. 664 p.
8. McLean SF. Case-Based Learning and its Application in Medical and Health-Care Fields: A Review of Worldwide Literature. *J Med Educ Curric Dev*. 2016;3:JMECD.S20377. DOI: 10.4137/JMECD.S20377. PMID: 29349306.
9. Popper K. In *Logik der Forschung [The Logic of Scientific Discovery]*. 1934. [In German]. Trans.: Abingdon-on-Thames: Routledge; 1959. 513 p.

10. Shevchenko AS, Brown GW. What evidence-based medicine can oppose to falsifications in science. *Bull KhRIPHS*. 2020;96(4):61-73. DOI: 10.5281/zenodo.5076629.
11. Vere J, Gibson B. Evidence-based medicine as science. *J Eval Clin Pract*. 2019;25(6):997-1002. DOI: 10.1111/jep.13090. PMID: 30575209.
12. Jakovljevic M, Ostojic L. Science and Pseudoscience in Medicine: Evidence-Based vs. Evidence-Biased Medicine. *Psychiatr Danub*. 2016;28 Suppl 2:186-90. PMID: 28035123.
13. Wilson R, Godfrey CM, Sears K, Medves J, Ross-White A, Lambert N. Exploring conceptual and theoretical frameworks for nurse practitioner education: a scoping review protocol. *JBIS Database System Rev Implement Rep*. 2015;13(10):146-55. DOI: 10.11124/jbisrir-2015-2150. PMID: 26571290.
14. Shevchenko AS, Shevchenko VV, Shumskyi OL, Shtefan LV, Duniev OO, Shaida VP. Competence Approach in Modern Engineering Education of Ukraine: Assessment of Development. 2023 IEEE 5th International Conference on Modern Electrical and Energy System (MEES), Ukraine, Kremenchuk, 27–30 Sep 2023. New York-Stevenage: IEEE Xplore, 2024. P. 644-9. DOI: 10.1109/MEES61502.2023.10402528.
15. Boychuk YuD. (Ed.) *General theory of health and health-saving: a collective monograph*. Kharkiv: Rozhko SG; 2017. 488 p.
16. Shevchenko AS, Shevchenko VV, Prus VV. Competencies in Higher Education Standards of Ukraine: Definition, Content and Requirements for the Formation Level. *Proceedings of the 26th International Conference on Interactive Collaborative Learning (ICL2023). Towards a Hybrid, Flexible and Socially Engaged Higher Education. Lecture Notes in Networks and Systems*. 8 p. Springer, Cham.
17. Approved standards of higher education. Ministry of Education and Science of Ukraine [Internet]. Available at: <http://surl.li/qoqcc> [in Ukrainian].
18. Kalashnikova S, Bazeliuk N, Bazeliuk O. Teaching excellence in higher education: theory and practice. Kalashnikova S. (ed). Kyiv: IHE NAESU; 2023. 258 p.
19. Kovtunets V, Lylyk I, Maksymenko O, Melnyk S, Rakov S, Semyhina T, Sereda L. A guide for evaluating the results of training for the assignment of professional qualifications. Kovtunets V, Semigina T (eds). Kyiv: TOV "VISTKA"; 2021. Available at: <https://library.fes.de/pdf-files/bueros/ukraine/19987.pdf> [in Ukrainian].
20. The Key Competences for Lifelong Learning. An annex of a Recommendation of the European Parliament and of the Council on 18 December 2006 on European Framework of Key Competences (Official Journal of the European Union L394). Belgium: European Communities; 2007. 16 p. Available at: <https://is.gd/ZSot2f>
21. Yelnykova H. Adaptability in the theory of health-saving and valeological education. *Adaptive Management: Theory and Practice. Series Pedagogics*. 2022;14(27):10p. DOI: 10.33296/2707-0255-14(27)-01.
22. Shevchenko A, Zhoga R. Individual educational trajectory in modern Ukrainian higher education as a tool for adaptability to its environment. *Adaptive Management: Theory and Practice. Series Pedagogics*. 2023;16(31):15p. DOI: 10.33296/2707-0255-16(31)-16.
23. Shevchenko VV. The reform of the higher education of Ukraine in the conditions of the military-political crisis. *International Journal of Educational Development*. 2019;65:237-53. DOI: 10.1016/j.ijedudev.2018.08.009.
24. Hladchenko M, Vossensteyn H. Ukrainian students' choice of university and study programme: means-ends decoupling at the state level. *Quality in Higher Education*. 2019;25(2):133-54. DOI: 10.1080/13538322.2019.1634878.
25. Shevchenko A. Adaptation of the educational achievement evaluation system to the educational competency approach. *Oleksandr Dovzhenko Hlukhiv National Pedagogical University Bulletin. Series: Pedagogical Sciences*. 2022;3(50)Pt1:194-203. DOI: 10.31376/2410-0897-2022-3-50-194-203.
26. Shevchenko AS. Methodology of developing valeological competence in non-medical students through cloud technology. *Problems of engineering pedagogic education*. 2023;78:39-48. DOI: 10.32820/2074-8922-2023-78-39-48.
27. Shevchenko A. Qualimetric criteria for formation of valeological competence in the adaptive education system. *Adaptive management: theory and practice. "Pedagogy" series*. 2022;13(25):18p. DOI: 10.33296/2707-0255-13(25)-06.
28. Yelnykova H. Qualimetric Approach for New Valeological Disciplines Assessing in Ukrainian Electrical and Power Engineering Education. *Proceedings of the 2022 IEEE 4th International Conference on Modern Electrical and Energy System (MEES), Kremenchuk, Ukraine, 20–23 Oct 2022. USA, Washington, D.C.: Institute of Electrical and Electronics Engineers Xplore, 2023. P. 64-8. DOI: 10.1109/MEES58014.2022.10005712.*
29. Kanivets TM. *Basics of pedagogical training: educational and methodological manual*. Nizhin: Publisher IE Ly-senko MM, 2012. 102 p. [In Ukrainian].
30. Stages of system analysis according to Golubkov EP. *System Analysis Laboratory [Internet]*. DOI: 10.5281/zenodo.10645560.
31. Shevchenko A. On the Observance of Confidentiality in the Process of Teaching Valeological Disciplines to Students of Electrical and Power Engineering Specialties. *Proceedings of the 2022 IEEE 4th International Conference on Modern Electrical and Energy System (MEES), Kremenchuk, Ukraine, 20-23 October 2022. USA, Washington, D.C.: Institute of Electrical and Electronics Engineers Xplore, 2023. P. 49-53. DOI: 10.1109/MEES58014.2022.10005730.*

31. Principles for the Validation and Use of Personnel Selection Procedures. *Industrial and Organizational Psychology*. 2018;11(S1):1-97. DOI: 10.1017/iop.2018.195.
32. Sackett PR, Tippins NT, Winfred A Jr, Delany T, Dunleavy EM, Hayes TL, et al. Principles for the Validation and Use of Personnel Selection Procedures. 5th ed. Society for Industrial and Organizational Psychology, Inc.; 2018. 60 p. Available at: <https://www.apa.org/ed/accreditation/personnel-selection-procedures.pdf>
33. Shtefan LV, Shevchenko AS. Materials of academic discipline "Health Pedagogy": lectures, guidelines for practical classes, extracurricular activities, curriculum, diagnostic tools, syllabus, exam tickets; for applicants for higher education degree "bachelor" full-time and part-time educational forms for the specialty 011 "Educational, pedagogical sciences". Kharkiv: Ukrainian Engineering Pedagogics Academy, 2019. 171 p. DOI: 10.5281/zenodo.4110899.
34. Lytvynov RN. Human relations code-1 (Part 1: "Triangle of suffering", how to recognize yourself in it and get out of it). *Bull KhRIPHS*. 2019;5(91):3-10. DOI: 10.5281/zenodo.3553041.
35. Lytvynov RN. Human relations code-1 (Part 2: New roles of the Karpman's triangle at other energy levels). *Bull KhRIPHS*. 2019;7(92):30-6. DOI: 10.5281/zenodo.3587894.
36. Rogers CR, Rosalind F (eds). *Psychotherapy and Personality Change: Coordinated Research Studies in the Client-Centered Approach*. Chicago: University of Chicago Press; 1954. 446 p.
37. Shevchenko AS, Shtefan LV, Shevchenko VV. New Valeological Disciplines in Ukrainian Electrical and Power Engineering Education. Proceedings of the 2022 IEEE 4th International Conference on Modern Electrical and Energy System (MEES), Kremenchuk, Ukraine, 20–23 Oct 2022. USA, Washington, D.C.: Institute of Electrical and Electronics Engineers Xplore; 2023. P. 22-6. <https://doi.org/10.1109/MEES58014.2022.10005756>
38. Boyko VV. The energy of emotions in communication: a look at yourself and at others. m; 1996. 472 p.
39. Lyoshenko O, Kondratieva V. Diagnosis, prevention, correction of the "emotional burning" syndrome. *Visnyk of the Lviv University [Bulletin of the Lviv University]. Series Psychological sciences*. 2021;10:105-12. DOI: 10.30970/PS.2021.10.15. [In Ukrainian].
40. Yehorova Ye. Psychological correlates of emotional burnout syndrome in pedagogical and vocational professionals. *Collection of Research Papers "Problems of Modern Psychology"*. 2011;(11):267-78. Available at: <https://journals.urau.ua/index.php/2227-6246/article/view/161298> [in Ukrainian].
41. Piankivska LV. Features of the manifestation of the syndrome of "emotional burnout" in cadets. *Bulletin of National Defense University of Ukraine*. 2018;49(1):74-82. DOI: 10.33099/2617-6858-2018-49-1-74-82. [In Ukrainian].
42. Vasheka TV, Tukaiev SV. Determinants of emotional burnout of students studying psychology in learning. *Problems of General and Educational Psychology*. 2011;13(6):47-55. Available at: <https://www.academia.edu/27969143> [in Ukrainian].
43. Kocharyan GS, Kocharyan AS. *Psychotherapy of sexual disorders and marital conflicts*. Medicine, 1994. 224 p.
44. Aleshina Yu. *Individual and family psychological counseling*. Class; 2004. 108 p.
45. Alieva TDK, Shevchenko A. On the issue of reproductive losses prevention in Ukraine. *Inter Collegas*, 2021;8(1): 59-66. DOI: 10.35339/ic.8.1.59-66.
46. Burtyansky DL, Krystal VV. *Sexual disharmony of a married couple and its correction: A study guide for doctors*. Kharkiv, 1982.
47. Sterlin H. *Family theories: an introduction*. Operational theories of personality. New York: Brunner/Mazel; 1974.
48. Satir V. *Conjoint family therapy*. 3rd revised, expanded ed. California: Science and Behavior Books; 1983. 289 p.
49. Berg-Cross L. *Couples therapy*. 2nd ed. Abingdon (UK): Routledge (Taylor & Francis), 2001. 468 p.
50. Kokun OM, Ahaiev NA, Pishko IO, Lozinska NS. *Fundamentals of psychological knowledge about mental disorders for a military psychologist*. Methodical handbook. Kiev: MDU; 2018. 310 p. [In Ukrainian].

Cite in Vancouver style as: Shevchenko AS, Tolstaia TYu, Shtefan LV, Shevchenko VV, Kucherenko SM, Kucherenko NS. The use of psychological and psychiatric methods in determining valeological competence formation in non-medical students of Ukraine. *Inter Collegas*. 2023;10(2):52-7. <https://doi.org/10.35339/ic.10.2.sts>

Creative Commons license (BY-NC-SA) Shevchenko A.S., Tolstaia T.Yu., Shtefan L.V., Shevchenko V.V., Kucherenko S.M., Kucherenko N.S., 2023.