

Subjective Attitude to the Health of Ukrainian Youth during the War

Svitlana ZABOLOTSKA¹,
Mariia ZAMISHCHAK²,
Myroslav SAVCHYN³,
Lesia VASYLENKO⁴,
Andrii ZYMIANSKYI⁵,
Svitlana BILOZERSKA⁶,
Halyna OZHUBKO⁷,
Svitlana MASHCHAK⁸

¹ Candidate of psychological sciences associate professor Department of Psychology, Ivan Franko State Pedagogical University, Drohobych, Ukraine, svitlana.zabolotska@ukr.net

² Candidate of psychological sciences, associate professor Department of Psychology, Ivan Franko State Pedagogical University, Drohobych, Ukraine, dpszammeri@gmail.com

³ Doctor of Science in Psychology, Full Professor Department of Psychology, Ivan Franko State Pedagogical University, Drohobych, Ukraine, msavchun@gmail.com

⁴ Candidate of psychological sciences, associate professor, associate professor Department of Psychology, Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine, vasyl.lesia@gmail.com

⁵ Candidate of psychological sciences, associate professor Department of Psychology, Ivan Franko State Pedagogical University, Drohobych, Ukraine, zimyan79@gmail.com

⁶ Candidate of psychological sciences, associate professor, associate professor Department of Psychology, Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine, Lana_sun@meta.ua

⁷ Candidate of psychological sciences, associate professor, associate professor Department of Psychology, Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine, galina.ozhubko@gmail.com

⁸ Associate Professor of the Department of the Theoretical and Practical Psychology of the Lviv Polytechnic National University, Lviv, Ukraine, nikolcom@i.ua

Abstract: *The purpose of this study was to find out the differences in the attitude of young people who reached adulthood toward their health during a period of moderate (epidemic) and strong (wartime) deprivation of comfortable life and a surge of national consciousness that changed egocentric accents to subjective general ones.*

The use of methods of theoretical, systematic and comparative analysis, supplemented by statistical and correlational research, has shown: young people have hardly changed their own SCH after the deployment of tragic actions in their country: they have accumulated and directed the mental potential to achieve freedom, national self-identity and passionarity. At the same time, SCH has receded into the background and has not given way at all to the mass life-saving, protective or other egoistic patterns expected at the beginning of the study.

The international significance of the article is that, for the first time in science, the authors have begun to study SCH in the context of a global conflict that has unexpectedly affected personal self-preservation motives and increased attention to one's health.

Keywords: *mobilization of mental potential; defamation processes; comfort deprivation; passionarity; quantum leap of subjectivity.*

How to cite: Zabolotska, S., Zamishchak, M., Savchyn, M., Vasylenko, L., Zymianskyi, A., Bilozerska, S., Ozhubko, H., & Mashchak, S. (2023). Subjective Attitude to the Health of Ukrainian Youth during the War. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 14(4), 75-87. <https://doi.org/10.18662/brain/14.1/407>

Introduction

The current young person's consciousness is heavily focused on material values, pleasures, social networking life, prestige, power, etc. This distracts and prevents adequate perception of signals coming from the body and inner world and is an early health message system. Health is natural and normal to the individual, so the healthy person does not pay attention to its bodily and psychological manifestations. Paradoxically, but more often than not, a healthy adult person often does not appreciate his/her health, does not assess its state, does not realize the consequences of the influence of lifestyle and characteristics of his/her own personality on health, age-related changes in the state of health components. This is especially true for a person of adolescent age.

It is widely known without scientific research that a person only after partial or complete loss of health rethinks his/her attitude to health, makes efforts to restore it. The perception of health of a nearly healthy person at college age who is not actively engaged in his or her health may not be clear and emotionally vague. A young person may know what to do (behavior) and how to do it (ability), but also may do nothing because it is not a value to them, whether or not they are convinced that it cannot change anything themselves. If health does hold a high position in a person's system of values, then his behavior is initiated and guided by a specific motive - the will to health. In the state of subjective health, it would seem, there are no changes, in fact the young person at the student age simply is not taught to identify and fix them or somatically stimulate the need for it. Ukrainian valeologists have repeatedly written about this in the context of self-regulation (Karasiievych et al., 2021; Demchenko et al., 2021) or in the context of sports coaching and health physical education (Maksymchuk et al., 2020a; Maksymchuk et al., 2020b)

The relevance of the article is determined by alarming tendencies in the post-Soviet East Slavic region, particularly in Ukraine: despite the growth of living standards and development of valeological culture and personal psychohygiene, markers of subjective picture of health show its low value and low level of awareness. In the early 2000s in the East Slavic republics, sociological surveys showed that the personal importance of health for a mature person takes only 3 - 5 places (Zhuravleva, 2006; Obrazhey & Podvalskaya, 2010). Work, family well-being, children's successes seemed more important to adults. Here we can make some very general and even psychologically philosophical conclusions: low valeological culture has personal determinants and is associated with the inability of post-Soviet

people to love and accept themselves, their orientation to seek the highest values outside of themselves, to serve and give back. In other words, the invariant pro-Soviet stereotype still mentally operates in Ukrainians: *Happiness is when everything is good, but not at me, but outside of me: at work, in the country, with children, etc.*

Among popular literature and mass-media publications in Ukraine over the past decade we have found many materials that would surprise a resident of the conditional West. So in the article "It has become fashionable among Ukrainians to lead a healthy lifestyle" (2013), published on the authoritative news portal TSN, we found phrases that should shock the newest civilized person, for example: The fashion to pay attention to their health came to Ukraine from Europe, but many Ukrainians still believe that a healthy lifestyle is expensive and hard (Yeryomina, 2013).

Defamation processes in the feeling and awareness of their own health is evidenced by statistical and demographic data conducted in Ukraine and Belarus from 2014 to 2020. We notice a strong effect of subjective and psycho gender factors. For example, men who abused smoking and who statistically work harder and live less than women showed higher levels of cardiovascular disease and sense of health than women on the background of feelings of social inferiority and mental character (Agabekova, 2021).

Our theme has experienced the most acute relevance only now: for the last three years new destructive factors have appeared in the Ukrainian neurosocial continuum (first the COVID-19 pandemic and, since February 2022, the Ukrainian-Russian war), which would have by deprivation of comfortable life, numerous mental and physical sufferings attract more attention of young people to their health. Such a press position we formulate also against the background of the fact that Ukrainian youth has changed dramatically, matured in a quantum leap of military mobilization and complete rearrangement of their lives, so it would be relevant to measure and describe changes in the subjective attitude of young Ukrainians during the war.

Therefore, we chose the purpose of our article to investigate the subjective concept of health (SCH) of Ukrainian youth, in particular, to compare their prewar and wartime situation in the context of a quantum leap of national credibility and activity with the love of neuroscientific attitudes. The main goal was to find the presence or absence of changes in relation to their health in the context of growth and change in value-based subject centric attitudes.

In the study, the authors used **methods** of selecting relevant material (data collection) and theoretical methods. Most of all, the authors used generalization, comparison, extrapolation of data to neuroscientific theory, and establishment of correlational, structural, and determinant relationships.

The criteria for determining the level of SCH development were: 1) the level of development of individual components (high, medium, low); 2) the integrity of the concept (representation of components); 3) harmony - a combination of levels of component development, when there are no opposing levels of development of individual components. The study involved 354 students from 18 to 21 years old (210 girls 144 boys). The study was conducted in 2019 - 2020 (first phase) and summer 2022 - second phase.

Research Ethics. The survey was conducted online during students' distance learning with student ethics committees' approval. Also, all students voluntarily agreed to participate in the study.

Theoretical study of SCH using integrative and neuroscientific approach

At the end of the twentieth century in wellness and related sciences for a long time we observed an excessive differentiation of concepts that the neuroscientific interdisciplinary paradigm was able to integrate. The terms health perception (Chipperfield, 1993; Idler & Kasl, 1991); health self-assessment (McCallum et al., 1994; Mossey & Shapiro, 1982) were then used. The first routes to integrative health research were taken by scholars in the late 1990s: the determination of perceptual and objective health states was studied (Borawski et al., 1996; Idler & Benyamini, 1997); stimulating subjective control of one's own states (Menec & Chipperfield, 1997), etc. The aforementioned studies generally emphasize the importance of subjective assessment of health, in particular, they focus attention on the importance of self-awareness of their physical state, biological resources, their capabilities, desires, needs of different levels, the degree of their satisfaction, protection mechanisms, as well as their physical potential, their own destiny. These studies have shown that the perception of health (perception of health) is a condition for the successful rehabilitation of patients. It turns out that in certain situations subjective perception of the level of one's health is much more reliable predictor of the emergence and course of the disease than its objective indicators.

Scientists began to pay sufficient attention to subjective health indicators in the second half of the twentieth century. They argued that these indicators operate within variable (individual) models of anxiety (Hunt & Mc

Ewen, 1980, p. 231). The primary function of these models is to provide as objective a tool for self-monitoring and self-diagnosis as possible. Currently, the epidemiological, politico-military, demographic, and other crisis events of the 1920s have forced scientists to pay close attention to the problems of the subjective concept of health (Assari, 2018; Ohlbrecht & Jellen, 2021) and engage in a definitive ordering of this complex category.

However, scholars have yet to agree on and unify the entire term apparatus, nomenclature, and structure of this phenomenon. Even the most recent studies on the topic testify to the disorderliness and non-uniformity of the varieties of subjective conceptions of health, their components, attributes and functions. For example, we can encounter synonymous or related terms that replace the main term and increase epistemic entropy: subjective health complaints, subjective health status, subjective health satisfaction, subjective health quality of life, etc (Davillas et al., 2022; Ehmann et al., 2020).

However, we want to emphasize: in recent years, scientists have identified the most significant predictors of the quality of life of young people, which proved that the subjective experience of such quality is closely related to the subjective concept of health. At the same time the constructs of subjective norms turned out to be primarily psychological: positive thinking, satisfaction. With these facts it is easy to explain why during the war period the concept of health was replaced by the concept of survival, and subjective constructs were reduced to a minimum.

At the same time, the deprivative military environment requires mobilization and increased self-efficacy for subjects to survive. Researchers have long proven that the need for self-efficacy is a predictor of valeologically relevant behavioral intentions. We have observed that young people in Ukraine during martial law tend to restrict themselves from bad habits, work hygiene, and self-discipline in order to be generally efficient in Ukrainian society. Consequently, passionate tendencies of subjective awareness in the context of global events may be predictors of valeological meaningful behavior. However, we suspect that such subjective motivation is not valeological, medical or other health-related. We will test this in the next chapter.

Scientists pointed out that destructive factors affecting subjective health are often studied in isolation and do not include external (smoking, overwork, overeating) and internal (anxiety, low self-esteem, expectation of failure) factors in a single study. Scientists believe that logistic and correlational analyses can be useful in linking objective factors to attitudes, which is what we did in the next part of our article.

Of interest to us will also be the neuroscientific interpretation of the results, because we know that in acute, terminal, or mobilizing states of the psyche, the neuropsychological and neurophysiological correlates of value, intension, or other subject-oriented phenomena are most pronounced. Recently, correlations between subjective health factors have been studied by a group of scientists. They determined that subjective norms, educational and nurturing mediators, and perceptions of restrictive-controlling factors constitute three mutually deterministic levels of influence on health.

Back in 2019, we saw subjective shifts in values and behaviors in the impact of the COVID-19 pandemic: attitudes toward the pandemic and its consequences proved to be more relevant to young people than adherence to practical countermeasures. Now, in 2022, we see a similar thing in Ukraine in people's attitudes toward health in the context of military action. At the same time, the value-passionary aspect has become even more acute, and the attitude to one's health has not become better in spite of the objective danger.

Thus, the subjective concept of health as a structurally complex dynamic formation in the self-consciousness of the person. It arises and is differentiated on the basis of sensory impressions coming from the body, its systems and organs and characteristics of physical activity. However, it contains sensory, emotional, cognitive, and motivational-value aspects, taking the problem far beyond the somatic plane. That is, at the level of each of these aspects, subjective images of physical, emotional, intellectual, social, moral and spiritual health are presented.

Practical measurements of the subjective attitude of Ukrainians to their health and neuroscientific interpretation of the results

Back in the height of the coronavirus pandemic, in 2019, we conducted a general questionnaire survey among students regarding their attitudes toward health. This study was interpretive and at the data collection stage had the nature of an extended questionnaire. After its overall processing and synthesis, we found a number of incorrect attitudes and logical correlates in most of the questionnaires, indicative of defamation in the attitudes of the young but post-Soviet man toward himself and the world:

1. Minimum physical health requirements. Typical attitudes: a) *I do not have any pain, so I am healthy/healthy.* b) *I am not well with social security (realization, prosperity), but it is good that I am healthy/healthy.* c) *Healthy is when nothing hurts.* d) *I do not feel well, but health is still normal.*

Lack of tendency to be preventive, propaedeutic and prophylactic. Typical attitudes: a) *I don't like to visit doctors.* b) *My teeth are not very good, but they don't hurt yet.* c) *When it becomes absolutely difficult, then I will call a doctor.*

The main conclusion we can draw from the data obtained then is that there is a very low, and many people lack, valeological culture. We assume that it is based on a stereotypical system of contextual self-perception, formed by Soviet social policy (back then it was not the individual but the productive class, the people that were valued). This attitude to their health is reactive and actually conditionally reflexive in nature.

The results showed: the majority of students declare health as the most important aspect of life (their own or / and the health of loved ones), but on the questionnaire 83% of respondents revealed an insufficient level of SCH and only 17% satisfactory or good attitude to it and have a relatively adequate view, based on proactivity, self-control and constituting an existential value.

After more than half a year of the Ukrainian-Russian war, we decided to re-investigate the subjective picture of health among Ukrainian students, because we hoped for positive shifts in deprivation conditions. We also wanted to find out the correlations between conscious attention to one's health and real

After theoretical analysis and analysis of generalized empirical data from different sources (Davillas et al., 2022; Park et al., 2021) we consider it necessary to distinguish five types of adults' realization of subjective concept of health: ideal, optimal, situational-optimal, suboptimal and pathologizing

As the data in Tables 1 and 2 show, only 6.22% of the subjects have a high subjective concept of health, 33.05% have an average concept of health, and the majority (60.73%) have a low concept of health. This means that in the majority of the subjects the subjective concept of health is insufficiently formed.

Table 1 - Levels of development of the subjective concept of health

Levels of development of the subjective concept of health	Quantity	%
High	22	6,22
Avarage	117	33,05
Low	215	60,73

Source: Author's own conception

Table 2 - Types of realization of the subjective concept of health

The type of realization of the subjective concept of health	Quantity (total 354)	% of the subjects implementing this type of
Perfect	5	1,41
Optimal	27	7,63
Situational-optimal	35	9,89
Suboptimal	273	77,12
Pathologizing	14	3,95

Source: Author's own conception

As the data in Table 2 show, the vast majority of the subjects (77.12%) have a non-optimal type of subjective concept of health, 9.89% have a situational-optimal type, 7.63% have an optimal type, 3.95% have a pathological type, and only 1.41% have an ideal type. This means that the subjective concept of health in the majority of subjects (81.07%) includes destructive moments (lack of systematic control, untimely restoration of health, focus on preservation rather than focus on strengthening and development, limited use of means of health preservation, etc.).

One of the objectives of our study was to identify the correlation between the level of development of SCH and the types of its implementation. Generalized data on the corresponding correlations are presented in Table 3.

Table 3 - Correlations between the level of SCH development and the type of its implementation

The type of attitude toward one's health	Perfect	Optimal	Situational-optimal	Non-optimal	Pathological
High	0,8637	0,4929**	0,1021*	-0,1510*	0,0000
Average	0,1073	0,3862*	0,4951**	0,5663**	-0,0024
Low	0,0000	0,0020	0,1569*	0,6305**	0,3822*

Source: Author's own conception

The table shows that high level of SCH development corresponds to the ideal and optimal type of its realization, medium level of SCH development corresponds to the situational-optimal and optimal type of realization of the subjective concept of health, and low level corresponds to non-optimal and pathologizing types of realization.

Quantitatively, at a high level of SCH development 5 students out of 22 assigned to this level (22,7%) had the ideal type of realization, 13 (59,1%) had the optimal type and 4 (18,2%) had the situational-optimal type. No subjects with non-optimal and pathologizing types of realization were found at this level.

At the average level of development of SCH (177 students in total), 55 of them (31.1%) were found to be situationally-optimal, 113 (63.8%) - suboptimal, and 9 (5.1%) - optimal. No students with ideal and pathological type of realization were found at this level.

At the low level of development (215 students in total), 173 students (80.5%) were found to have a non-optimal type of realization, 28 (13.0%) had a situational-optimal type and 14 (6.5%) had a pathologizing type. The students with this level of SCH development were not found with the ideal and optimal type.

Summing up, it should be noted that, in general, the results of the study unambiguously confirmed a significant correlation between the levels of development of SCH and the types of its implementation in the life of students, in particular, there is an unambiguous trend: the higher the level of development of subjective concept of health, the more effectively the student preserves, strengthens, develops his health and effectively engaged in self-rehabilitation in a situation of health loss (illness, epidemic, stresses, etc.).

If we compare the data of the questionnaire survey of young people before the war (pathologizing factor COVID-19) and after six months of military operations, we see that the attentive attitude to their health has not increased (Table 4).

Table 4. Difference between attitudes toward one's health before and during the war

Destructive attitude		Constructive attitude	
Unoptimal and pathologizing (before the war)	Unoptimal and pathologizing (during war)	Sufficient or optimal (before the war)	Sufficient or optimal (in time of war)
83 %	80,1%	17%	19,9%

Source: Author's own conception

Such results indicate that the mental resource mobilized during the mass psychosocial deprivation switched not to the sphere of personal health, but to the value sphere of nationwide sanitation, subject-centeredness, and the desire for freedom.

Conclusions and Results

After the study, it became clear that SCH in typical psychosocial conditions weakly determines the modus behavior of young people in relation to their own health and determines the importance of studying subjective perceptions and attitudes toward health in the conditions of holistic life activity. In addition, post-Soviet adults are clearly dominated by the symptomatic-reactive type of attitude to their health. Its invariant idea is as follows: I think about health, treat myself, change my way of life if I experience somatic, neurophysiological or mental symptoms. At the same time, the "trend" for preventive medicine and visits to psychologists is just beginning to gain momentum, and surveys indicate that the psychological plan is stereotypically considered personal and should not be objectified as a symptom of health/unhealthy.

Despite the lack of significant shifts in relation to their health, Ukrainian youth increasingly begin to value freedom, spiritual values, and take direct selfless participation in helping society and the army (volunteering, fundraising) while almost never exhibiting egocentric markers of such activity. Of course, adolescents and young adults have undergone a brief adaptive period, but have undergone a leap in mental maturation. Therefore, we explain the phenomenon of inattention to one's health under martial law by the switching of deep value-based subject centric mental mechanisms. At the same time, the role of young adults in social politics, economics, and sociocultural movements rapidly increased.

An important and unexpected result was that with the continuation of the war (at the time of writing almost 8 months), awareness of its terrible consequences and the growing personal physical, social and existential danger, Ukrainian young people almost did not change their subjective attitude and subjective influence on their own health. This allows us to deny the thesis about the dominance in the current culture and society of pragmatic and comfortable relations in the formation of everyday values: at the risk of losing such values, they depreciate, so instead of the growth of bodily importance we have a surge of volitional-existential reorientations of youth. Under this condition, personal health recedes into the background even more than it did under the conditions of national uncertainty that prevailed earlier.

Research limitation. Our paper opens up the unexplored neuro philosophical problem of personal sacrifice and highly conscious youth participation in the context of military conflict. Such participation, despite bodily discomfort and psychological deprivation, does not lead to self-centeredness and does not affect young people's focus on their health, which was unexpected.

Acknowledgement

The authors would like to thank the Ukrainian students who agreed to take the survey (previous and main) remotely, as well as their mentors and the administration of educational institutions for their understanding and assistance. The authors were privileged to collaborate in a unified team when writing, expediently and complementarily performing specific tasks within the framework of the purpose.

The authors have equally contributed to writing the article. In particular, MYROSLAV SAVCHYN collected data by creating a corpus of relevant theories and classifications. SVITLANA ZABOLOTSKA reinvented taxonomic ranks within a single system. SVITLANA MASHCHAK was responsible for nomenclature. MARIIA ZAMISHCHAK structured subjective health concept as a system, and LESIA VASYLENKO clarified taxonomic ranks. ANDRII ZYMIANSKYI projected health care strategies. HALYNA OZHUBKO acted as the editor-in-chief and versifier of the article.

References

- Agabekova, N.V. (2021). Sub'yektivnaya otsenka zdorov'ya naseleniyem Belarusi: analiz opredelyayushchikh faktorov. Strategiya razvitiya ekonomiki Belarusi: vyzovy, instrumenty realizatsii i perspektivy [Subjective health assessment by the population of Belarus: analysis of determinants]. In V.L. Gursky (ed.), *Strategy for Economic Development of Belarus: Challenges, Instruments of Implementation and Prospects*, Vol. 2 (pp. 154-160). <http://bseu.by/personalpages/Agabekova/publications.htm>
- Assari, S. (2018). Blacks' diminished return of education attainment on subjective health: Mediating effect of income. *Brain Sciences*, 8(9), Article 176. <https://doi.org/10.3390/brainsci8090176>
- Borawski, E. A., Kinney, J. M., & Kahana, E. (1996). The meaning of older adults' health appraisals: Congruence with health status and determinant of mortality. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 51(3), S157–S170. <https://doi.org/10.1093/geronb/51B.3.S157>

- Chipperfield, J. G. (1993). Incongruence between health perceptions and health problems: Implications for survival among seniors. *Journal of Aging and Health*, 5, 475–496. <https://doi.org/10.1177/089826439300500404>
- Davillas, A., Burlinson, A., & Liu, H. H. (2022). Getting warmer: Fuel poverty, objective and subjective health and well-being. *Energy Economics*, 106, Article 105794. <https://doi.org/10.1016/j.eneco.2021.105794>
- Demchenko, I., Maksymchuk, B., Bilan, V., Maksymchuk, I., & Kalynovska, I. (2021). Training future physical education teachers for professional activities under the conditions of inclusive education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 191–213. <https://doi.org/10.18662/brain/12.3/227>
- Ehmann, A. T., Groene, O., Rieger, M. A., & Siegel, A. (2020). The relationship between health literacy, quality of life, and subjective health: Results of a cross-sectional study in a rural region in Germany. *International Journal of Environmental Research and Public Health*, 17(5), Article 1683. <https://doi.org/10.3390/ijerph17051683>
- Hunt, S. M., & McEwen, J. (1980). The development of a subjective health indicator. *Sociology of Health & Illness*, 2(3), 231–246. <https://doi.org/10.1111/j.1467-9566.1980.tb00213.x>
- Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behavior*, 38, 21–37. <https://pubmed.ncbi.nlm.nih.gov/9097506/>
- Idler, E. L., & Kasl, S. (1991). Health perceptions and survival: Do global evaluations of health status really predict mortality? *Journal of Gerontology: Social Sciences*, 46, 55–65. <https://doi.org/10.1093/geronj/46.2.S55>
- Karasievych, S., Maksymchuk, B., Kuzmenko, V., Slyusarenko, N., Romanyshyna, O., Syvokhop, E., Kolomiitseva, O., Romanishyna, L., Marionda, I., Vykhruhshch, V., Oliinyk, M., Kovalchuk, A., Halaidiuk, M., & Maksymchuk, I. (2021). Training future physical education teachers for physical and sports activities: Neuropedagogical approach. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 543–564. <https://doi.org/10.18662/brain/12.4/264>
- Maksymchuk, B., Gurevych, R., Matviichuk, T., Surovov, O., Stepanchenko, N., Opushko, N., Sitovskiy, A., Kosynskiy, E., Bogdanyuk, A., Vakoliuk, A., Solovyov, V., & Maksymchuk, I. (2020a). Training future teachers to organize school sport. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(4), 310–327. <https://doi.org/10.18662/rrem/12.4/347>
- Maksymchuk, B., Matviichuk, T., Solovyov, V., Davydenko, H., Soichuk, R., Khurtenko, O., Groshovenko, O., Stepanchenko, N., Andriychuk, Y., Grygorenko, T., Duka, T., Pidlypniak, I., Gurevych, R., Kuzmenko, V., & Maksymchuk, I. (2020b). Developing healthcare competency in future

- teachers. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(3), 24–43.
<https://doi.org/10.18662/rrem/12.3/307>
- McCallum, J., Shadbolt, B., & Wang, D. (1994). Self-rated health and survival: A 7-year follow-up study of Australian elderly. *American Journal of Public Health*, 84(7), 1100–1105. <https://doi.org/10.2105/AJPH.84.7.1100>
- Menec, V. H., & Chipperfield, J. G. (1997). The interactive effect of perceived control and functional status on health and mortality among young-old and old-old adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 52(3), 118–126. <https://doi.org/10.1093/geronb/52B.3.P118>
- Mossey, J. M., & Shapiro, E. (1982). Self-rated health: A predictor of mortality among the elderly. *American Journal of Public Health*, 72(8), 800–808. <https://doi.org/10.2105/AJPH.72.8.800>
- Obrazhey, O. N., & Podval'skaya, V. S. (2010). Aktual'nost' izucheniya samosokhranitel'nogo povedeniya naseleniya [The relevance of studying the self-preservation behavior of the population]. *Sociological Almanac*, (1), 262-269 <https://cyberleninka.ru/article/n/aktualnost-izucheniya-samosokhranitel'nogo-povedeniya-naseleniya/viewer>
- Ohlbrecht, H., & Jellen, J. (2021). Unequal tensions: The effects of the coronavirus pandemic in light of subjective health and social inequality dimensions in Germany. *European Societies*, 23(sup1), S905–S922. <https://doi.org/10.1080/14616696.2020.1852440>
- Park, S., Lee, H. J., Jeon, B. J., Yoo, E. Y., Kim, J. B., & Park, J. H. (2021). Effects of occupational balance on subjective health, quality of life, and health-related variables in community-dwelling older adults: A structural equation modeling approach. *Plos One*, 16(2), e0246887. <https://doi.org/10.1371/journal.pone.0246887>
- Yeryomina, S. (2013). *Sered ukrayintsiv stalo modnym vesty zdorovyy sposib zhyttya* [It has become fashionable among Ukrainians to lead a healthy lifestyle]. TSN.
- Zhuravleva, I.V. (2006). *Otnosheniye k zdorov'yu individa i obshchestva* [Attitude to the health of the individual and society]. Nauka.