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THE ADVANTAGES OF DEVELOPING A PHYSICAL EDUCATION TEACHER'S VITALITY AND ADAPTABILITY DURING CHANGES AND CRISES

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The scientific article is devoted to the analysis of factors and predictors affecting the process of activation of vitality and adaptability of a physical culture teacher in conditions of crisis and uncertainty. The analysis of literary sources of information made it possible to identify resilience as a system of personal beliefs, which can contribute to the development of a person's willingness to choose to participate in situations of increased complexity for him, to keep control over them and manage them, to be able to perceive even negative events as an experience and successfully cope with them. The conducted research made it possible to determine four factors of subjectively significant psychological threats for the physical culture teacher in the educational environment (social nature, labor intensity, interpersonal relations, digitalization of education). Direct correlations of the physical education teacher's satisfaction with the significant characteristics of the educational environment, its referential significance, psychological security with well-being and vitality have been revealed; inverse relationships between threats of a social nature and the teacher's well-being, vitality, psychological safety and referential significance. It was established that the main predictors of the physical culture teacher's viability in the educational environment were his referentiality and subjectively significant threats of a social nature for the teacher. Taking into account the identified predictors of the physical culture teacher's sustainability, it becomes obvious that the tasks of the school should include the creation of a more emotionally favorable educational ecosystem for the teacher, which would encourage a sense of personal value on the part of its subject, reducing the tendency to alienation, supporting the referentiality of the environment. It was determined that in order to promote the more effective development of the vitality of the physical education teacher, it is advisable to conduct training in interpersonal communication skills, which will help prepare specialists to participate in effective interaction with schoolchildren, maximizing the sense of achievement and minimizing the feeling of emotional exhaustion and depersonalization.

ОСОБЛИВОСТІ РОЗВИТКУ ЖИТТЄСТІЙКОСТІ ТА АДАПТИВНОСТІ ВЧИТЕЛЯ ФІЗИЧНОЇ КУЛЬТУРИ В УМОВАХ ЗМІН І КРИЗ

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Ключові слова:

*життєстійкість,
адаптивність,
стресогенність, емоційне
вигорання, освітнє
середовище, психологічне
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Наукова стаття присвячена аналізу факторів і предикторів, що впливають на процес активізації життєстійкості й адаптивності вчителя фізичної культури в умовах кризи та невизначеності. Аналіз літературних джерел інформації дав змогу визначити життєстійкість як систему переконань особистості, яка має змогу сприяти розвитку готовності особи із зацікавленістю брати участь у ситуаціях підвищеної для неї складності, тримати контроль над ними та керувати, вміти сприймати навіть негативні події як досвід і успішно справлятися з ними. Проведене дослідження дало змогу визначити чотири фактори суб'єктивно значущих психологічних загроз для вчителя фізичної культури в освітньому середовищі (суспільного характеру, інтенсивності праці, міжособистісних відносин, цифровізації освіти). Виявлено прямі взаємозв'язки задоволеності вчителя фізичної культури значущими характеристиками освітнього середовища, його референтною значимістю, психологічною захищеністю із самопочуттям і життєстійкістю; зворотні взаємозв'язки між загрозами суспільного характеру та самопочуттям педагога, життєстійкістю, психологічною безпекою та референтною значимістю. Встановлено, що основними предикторами життєстійкості вчителя фізичної культури в освітньому середовищі є його референтність і суб'єктивно значущі для вчителя загрози суспільного характеру. З огляду на виявлені предиктори життєстійкості вчителя фізичної культури, стає очевидним, що до завдань школи має входити створення більш емоційно сприятливої для вчителя освітньої екосистеми, яка заохочувала б почуття особистої цінності з боку її суб'єкта, зменшуючи тенденцію до відчуження, підтримуючи референтність середовища. Визначено, що для сприяння більш ефективному розвитку життєстійкості вчителя фізичної культури доцільно проводити навчання навичок міжособистісного спілкування, яке допоможе підготувати фахівців до участі в ефективній взаємодії зі школярами, максимізуючи почуття досягнення та зводячи до мінімуму почуття емоційного виснаження та знеособлення.

At the current stage of society's development, education in Ukraine is becoming the most important social institution, which allows not only to broadcast new life meanings and social values, but also to influence the development of social consciousness. The changes taking place in various spheres

of life in many countries, the commonality of global problems, and the entry into the era of information civilization led to the appearance of fundamentally new issues in the field of education. This led to the renewal of requirements for the training and professional development of specialists who are able to

successfully adapt, self-determine in future activities and maintain vitality in extremely difficult conditions of uncertainty [1]. The urgency of this problem lies in overcoming the contradictions that arise between: the objective need of society for competitive physical education teachers and insufficient educational and scientific-methodical support for their professional development in the conditions of martial law; the processes of reforming modern higher education and insufficient consideration in the development process of the sustainability and adaptability of physical culture teachers in conditions of uncertainty; the focus of higher education on European integration and insufficient consideration of the positive gains of world experience in the process of developing the vitality and adaptability of physical culture teachers. The social significance of the development of vitality and adaptability of physical culture teachers in conditions of uncertainty, insufficient theoretical and practical development of the specified problem, the revealed objective contradictions determined the choice of the topic of the work.

The purpose of the article is to analyze peculiarities of the manifestation of vitality and adaptability of a physical culture teacher in the process of professional self-realization in conditions of uncertainty.

Presenting main material. Taking into account the priority of taking care of students' health, the demand for physical education teachers, who are ready to implement pedagogical activities in conditions of reduced interest of children in physical education and sports, is growing. In order to maintain their psychological health and maintain quality work, modern physical education teachers must be prepared to overcome difficult professional situations. Our belief is that teachers must possess the ability to quickly recover from stress and use the experience gained for personal growth to cope with professional difficulties. This ability is called 'life resilience' and involves self-development, self-regulation, self-organization, self-motivation, activity and initiative, persistence, positive attitudes, an internal locus of control, and self-respect. The successful professional activity of physical education teachers requires sustainability as an important condition. The socio-economic profession of physical education teacher is characterized by a high level of stress. It has been proven that teachers experience a higher level of stress than other professional groups. Exposure to long-term stressors can lead to burnout and inability to perform work effectively for the teacher. A. Gallant and P. Riley draw attention to the numerous problems and failures that lead to teacher exhaustion, demotivation, stress and emotional burnout, especially during the first five years of teaching, known as the "vulnerable period", during which 40–50% teachers are laid off [3]. Among the reasons for this, N. Kelly includes a high workload, lack of support, fear of difficulties, inability to manage time and ignorance of how to control the behavior

of students and meet their needs [5]. The activities of physical education teachers are confined to specific conditions, unlike those of other teachers. There are three distinct categories of conditions: mental tension, physical activity, and external environmental factors associated with outdoor activities. According to the classification adopted in the psychology of work, the work of a physical education teacher can be included in the fourth group of mental tension according to the main characteristics of the activity. Susan Kobesa and Salvatore Maddi, American psychologists, defined resilience (which is translated as 'hardiness') in the 1980s [6]. They explained it as a person's psychological survivability and enhanced effectiveness, which is interconnected with the motives for transforming stressful events in his life, and also pointed out that it acts as an indicator of the mental health of an individual. S. Muddy's model defines resilience as a person's beliefs that help them stay active and avoid the negative consequences of stress. Vitality regulates stress and emotional burnout of teachers, increases their purposefulness, job satisfaction, well-being, quality of learning, job satisfaction, motivation, professional identity, activity, self-efficacy, etc. [7]. Y. Wang, based on Mansfield's model, describes a viable structure as a collective construct emerging from multi-level systems and ecosystems through personal (motivation) and contextual resources (mentoring), strategies (vocational learning) and outcomes (well-being) that dynamically interact with the friend [9]. According to A. Masten and co-authors, sustainability is not a quality of an individual's personality, but it is present in their behavior and lifestyle [8]. Q. Gu and Q. Li prove that "the nature of teachers' resilience is not innate, but depends on individual qualities in interaction with the contextual conditions in which teachers work" [4]. S. Corso-de-Zuniga's results, based on the Job Demand-Resources (JD-R) model and the conservation of resources theory, show that teachers with higher vitality experience less job satisfaction; vitality plays the role of a personal resource in the motivational process and performs a preventive function in the fight against burnout at work [2]. Summarizing the theoretical analysis, it is possible to deduce the components of the teacher's professional sustainability: resistance to stress, emotional burnout and professional deformation, the desire for self-development, goal-setting and goal-achieving skills, the ability to self-control, a high level of social competence.

In our empirical study, the issue of psychological safety of physical education teachers in the educational environment of the school is actualized through the study and analysis of their viability as participants in educational relations in conditions of uncertainty. At the same time, we consider the vitality of the teacher as a psychological resource and an integral characteristic of the individual, which provides the possibility of social and psychological adaptation in the conditions of subjectively significant challenges

and threats arising in the professional and pedagogical activity, which contributes to his psychological safety in the educational environment of the school.

The socio-psychological safety of education subjects (teachers and students) conducted in 2022–2023, which made it possible to identify the personally and professionally important qualities of a physical education teacher, which are factors of his socio-psychological safety. This study enhanced the variables studied, defined the theoretical and methodological foundations, and expanded the set of research methods. Systemic, personal-activity, and subject approaches are the basis of the research's theory and methodology. Cultural-historical psychology, its position on the social environment as a source of development, the position of resource and risk-resource approaches in psychology, the concept of "personal potential", methodological foundations of pedagogical psychology, theoretical and empirical approaches to the psychological safety of educational environment and interpersonal relations of its participants, socio-psychological aspects of personality adaptability. The studied sample included 51 teachers of physical culture of general educational institutions of Zaporizhzhya, Kherson, and Odesa regions (7% men, 93% women) aged from 21 to 56 years (Me = 47.8 years). The survey was conducted using Google Forms. Among the participants, 71% of the interviewees are teachers of city schools, 29% are teachers of rural schools, who have teaching experience from six months to 54 years (Me = 24.5 years). The subjects volunteered

to participate in the study while taking advanced training courses using the 'convenience' sampling method. The stratification method is used to create a randomized sample. At the first stage of the research using the focus group method, a list of possible threats to the sustainability of the physical education teacher in the educational environment was formed, which were summarized and combined into 20 variables. At the second stage, with the help of a special questionnaire, respondents were asked to evaluate the degree of relevance of the selected threats (on a Likert scale from 1 – “absolutely not relevant” to 5 – “very relevant”). In the second stage, teachers were asked to answer questionnaire questions to assess their sustainability in their pedagogical practice and reaction to psychological threats in the educational environment of the school. As a result of the study, the following methods were used: “Psychological safety of the educational environment of the school” (PBOS) (I. Baeva), “Test of vitality” (S. Maddi, adaptation of D. Leontiev), “Index of well-being” (WHO-5) (Well-Being Index, WHO).

The received empirical data were interpreted and processed using qualitative and quantitative methods of analysis, including: descriptive statistics, factor analysis (principal components method, Varimax rotation), Spearman correlation analysis, linear regression analysis (stepwise selection method). Taking into account the SPSS 26 package of statistical programs, the calculations were done. Table 1 presents the results of teachers' assessments

Table 1

Descriptive statistics of physical education teachers' assessment of threats to sustainability in the educational environment

Threats	min	Max.	Average	Standard deviation	Asymmetry	Kurtosis
Professional burnout	1	5	3,571	1.25934	-0.655	-0.614
Conflictogenicity	1	5	2.9063	1.23368	-0.034	-0.997
Interpersonal relations in the team	1	5	2.6254	1.28392	0.27	-1.126
Labor intensity	1	5	3.3444	1.31049	-0.421	-0.978
Deviant behavior of students	1	5	3.4109	1.2286	-0.468	-0.844
Stressogenicity, psychological tension	1	5	3,565	1.18239	-0.632	-0.539
Insufficient financial security	1	5	3,719	1.17405	-0.784	-0.26
Digitization	1	5	2.8459	1.16143	0.128	-0.894
Lack of competences	1	5	2.8218	1.17355	0.113	-0.957
Working conditions	1	5	3.5106	1.27054	-0.51	-0.887
Social insecurity	1	5	3.2296	1.28458	-0.376	-0.996
Deterioration of physical well-being	1	5	3.6073	1.24674	-0.619	-0.648
Decreased motivation to study and work	1	5	3.4713	1.22657	-0.592	-0.666
Dissatisfaction with work	1	5	3.1118	1.27311	-0.176	-1.054
Depression	1	5	3.0363	1.32524	-0.114	-1.167
psychological pressure	1	5	3.0755	1.32472	-0.163	-1.165
Distance Learning	1	5	3	1.27208	0.009	-1.111
Emotional discomfort	1	5	3.1541	1.28528	-0.204	-1.088

of threats to personal psychological safety in the educational environment. The calculation of kurtosis and asymmetry showed that the distribution of the values of each variable is approximately normal (the values lie in the range from -2 to $+2$). To determine the internal reliability – consistency of questionnaire items, Cronbach's α was calculated. Cronbach's $\alpha=0.957$ showed high consistency in the questionnaire.

The principal component method and Varimax rotation were used to process the results of teachers' assessment of sustainability threats in the educational environment. Table 2 presents the content, specific weight, and content of the factors. The obtained total share of variance (informativeness) of the factors was 70.5% – more than half, which is considered an acceptable result. We focused on factors that had loadings exceeding 0.5 when interpreting them.

The values of the selected factors (scores) were saved as variables (arithmetic mean sum of the items filling the factor) for further analysis of the relationship with the investigated psychological indicators. To identify the relationship between the studied indicators of vitality, psychological safety of teachers in the educational environment and their assessment of threats, a correlation analysis was conducted using Spearman's rank correlation. The most significant in the educational environment for teachers were the threats and risks associated with the intensity and working conditions, which affect the teacher's professional burnout, psycho-emotional and psycho-physical state, as well as the socio-economic

conditions of his work. The recognition of the presence of such threats indicates that teachers, as participants of the environment, have not fully formed a sense of the referential significance of the environment and a belief in psychological safety in it, which can potentially affect the psychological safety of students. Four factors that pose subjectively significant psychological threats to teachers in the educational environment were identified through factor analysis. The most significant factor is F1, which is defined as psychological threats of a social nature. It reflects:

- teacher depression, recognized in modern medicine as a social problem;
- psychological pressure exerted on teachers;
- emotional discomfort as a negative mental state of a person with a dominance of negative emotional valence, which is accompanied by an experience of dissatisfaction and can disorganize the regular activities of a physical education teacher;
- lack of social response to the teaching profession or “social recognition of the teaching profession in society in general”;
- social insecurity, manifested in the ratings “low social security”, “insecurity of personal space in social networks”, etc.;
- decrease in motivation to study, which manifests itself more and more often both on the part of students and on the part of parents regarding the education of their children.

The second factor F 2, which turned out to be associated with threats of work intensification

Table 2

The factor component of physical education teachers' assessment of threats to sustainability in the educational environment

Name of the factor (percentage of variance)	Variables	Specific weight
F1. Threats of a social nature (22.1%)	Depression	0.827
	Psychological pressure	0.714
	Emotional discomfort	0.648
	Lack of social response to the teaching profession	0.626
	Social insecurity	0.598
	Decreased motivation to study and work	0.588
F2. Threats of labor intensification (20.9%)	Deterioration of physical well-being	0.555
	Labor intensity	0.716
	Insufficient financial security	0.676
	Stressogenicity , psychological tension	0.671
	Professional burnout	0.627
	Working conditions (irregular day, material and technical support, number of reports, etc.)	0.579
F3. Interpersonal threats (17.1%)	Dissatisfaction with work	0.568
	Interpersonal relations in the team	0.799
	Conflictogenicity	0.751
F4. Difficulties of digitalization of education (12.7%)	Deviant behavior of students	0.507
	Digitization education	0.807
	Distance Learning	0.731
	Lack of competences	0.582

(20.75%), appeared in such assessments as “deterioration of health”, “high work intensity”, “insufficient financial security” (“insufficient wages fee”, “lack of money”; “low standard of living”). This factor also reflects the stressfulness of the profession and the psychological tension that arises and is maintained for a long time; professional burnout, which indicates, according to the WHO, the presence of work-related stress and leads to the exhaustion of the teacher's emotional and energy resources; working conditions (irregular day, material and technical support, number of reports, etc.) and, as a result, dissatisfaction with work.

The third factor F 3 reflects threats of an interpersonal nature (16.55%), which are the complication of relationships in the school team, the increase in conflict potential, which comes from both students and, according to many teachers, from parents. This factor is also associated with cases of disrespectful attitude towards the teacher, deviant behavior of students and inflated expectations of parents. Indicators of the factor F 4 constitute threats to the digitalization of education, which arose in connection with the need for forced remote educational and educational communications in connection with the martial law, distance learning, which is becoming the norm in the educational space. At the same time, teachers note the inadequacy of the material and technical base, often the lack of Internet and personal computers among students, especially in rural schools, as well as the insufficiency of their own professional competences related to the implementation of digital technologies.

Psychological security was assessed by physical education teachers at an average level, not with a tendency to be high, while mostly teachers noted security from psychological violence by colleagues and administration and to a lesser extent by students. It can be assumed that the rather high cohesion of pedagogical teams allows them to find ways to solve the problems that arise, but there are psychological difficulties in overcoming the destructions coming from schoolchildren. Referentiality of the educational environment is characterized by the predominance of a positive type of attitude towards it in more than 80% respondents, which expresses the presence of opportunities for self-development of teachers in the educational environment and their enthusiasm for the profession. The analysis and generalization of research results allowed us to assume existing relationships between the teacher's vitality and his well-being, significant characteristics of the educational environment, and subjectively significant psychological threats. All indicators of teachers' vitality (involvement, control, readiness to take risks, general vitality) are at an average level: teachers have sufficient confidence in themselves and in life, enjoy their activities, realize that they are able to influence events in their lives. This helps teachers

overcome stress without threats to their inner peace due to persistent coping with them and perceiving them as less significant, as well as maintaining the efficiency of professional activity. The average level of involvement indicates that teachers don't receive the most satisfaction from their professional activities. The average level of control indicates that the professional development of the teacher and his activities are influenced not only by him, but also by other people (colleagues, administration, etc.), apparently not allowing the teacher to feel independent in making decisions. The average level of risk acceptance is characterized by the fact that teachers are ready to act, but under the condition of guarantees of success, understanding, however, that any experience gained in life contributes to development.

Teachers rate their level of well-being slightly higher than the norm, which indicates that they do not have depressive symptoms, and in general we can talk about a fairly good mood and their energy. The analysis of the results of the correlation analysis made it possible to establish reliable relationships between the studied variables:

- satisfaction with the educational environment, its reference significance for the teacher, his security in the educational environment are positively correlated with his well-being and vitality in the educational environment ($p < 0.01$, $p < 0.05$);

- the identified factors of subjectively significant threats (of a social nature, intensification of work, interpersonal relations, digitization of education) worsen the well-being of the teacher, weaken his viability, and the psychological security of the teacher in the educational environment, reduce its reference significance ($p < 0.01$).

The conducted regression analysis showed that the teacher's vitality is influenced by the referentiality of the educational environment (positive, neutral, negative attitude of the teacher according to the indicators of cognitive, emotional and behavioral components) and subjectively significant threats of a social nature associated with depression, psychological pressure, insufficient social response to the teaching profession, social insecurity and a decrease in motivation to study. Thus, the main predictors affecting the viability of a physical culture teacher in the educational environment are threats of a social nature and referentiality of the educational environment.

Conclusions. The conducted research made it possible to determine four factors of subjectively significant psychological threats for the physical culture teacher in the educational environment (social nature, labor intensity, interpersonal relations, digitalization of education). Direct correlations of the physical culture teacher's satisfaction with the significant characteristics of the educational environment, its referential significance, psychological security with well-being and vitality have been revealed; inverse

relationships between threats of a social nature and the teacher's well-being, vitality, psychological safety and referential significance. It was established that the main predictors of the physical culture teacher's viability in the educational environment were his referentiality and subjectively significant threats of a social nature for the teacher. Taking into account the identified predictors of the physical culture teacher's sustainability, it becomes obvious that the tasks of the school should include the creation of a more emotionally favorable educational ecosystem for the teacher, which would encourage

a sense of personal value on the part of its subject, reducing the tendency to alienation, supporting the referentiality of the environment. It is also important that the society understands that the psychological safety of the physical education teacher and his viability is a serious problem and serious steps are needed to overcome it. Further research must focus on the role of other aspects in the vitality and adaptability of the physical culture teacher. To respond to emerging risks, it is necessary to develop resilience, reduce vulnerability, and reduce passivity.

BIBLIOGRAPHY

1. Джуринський П. Б. Теоретичні і методичні засади підготовки майбутніх учителів фізичної культури до здоров'язбережувальної професійної діяльності: дис. ... д-ра пед. наук. Одеса, 2013. 559 с.
2. Corso-de-Zuniga S., Moreno-Jimenez B., Garrosa E. et al. Personal resources and personal vulnerability factors at work: An application of the Job Demands-Resources model among teachers at private schools in Peru. *Current Psychology*. 2020. № 39. P. 325–336.
3. Gallant A., Riley P. Early career teacher attrition: new thoughts on an intractable problem. *Teacher Development*. 2014. № 18. P. 562–580.
4. Gu Q., Li Q. Sustaining resilience in times of change: Stories from Chinese teachers. *Asia-Pacific Journal of Teacher Education*. 2013. № 41 (3). P. 288–303.
5. Kelly N., Sim C., Ireland M. Slipping through the cracks: teachers who miss out on early career support. *Asia-Pacific Journal of Teacher Education*. 2018. № 46. P. 292–316.
6. Khoshaba D., Maddi S. Hardiness and Mental Health. *Journal of Personality Assessment*. 1994. Vol. 63. No 2. P. 265–274.
7. Maddi S.R., Harvey R.H., Khoshaba D.M., Fazel M., & Resurreccion N. The Personality Construct of Hardiness. *Journal of Humanistic Psychology*. 2009. 49 (3). P. 292–305.
8. Osadchyi V., Varina H., Falko N., Osadcha K., & Katkova T. The peculiarities of the usage of AR technologies in the process of hardiness of future professionals. *Journal of Physics*. 2021. 1840 (1).
9. Wang Y. Building Teachers' Resilience: Practical Applications for Teacher Education of China, *Frontiers in Psychology*. *Frontiers in Psychology*. 2021. № 12. P. 738606.

REFERENCES

1. Dzhurynskyi, P.B. (2013). *Teoretychni i metodychni zasady pidhotovky maibutnikh uchyteliv fizychnoi kultury do zdoroviazberezhuvalnoi profesiinoi diialnosti* [Theoretical and methodological foundations for preparing future physical education teachers for healthy professional activity]. *Doctor's thesis*. Odessa. 559 p. [in Ukrainian].
2. Corso-de-Zuniga, S., Moreno-Jimenez, B., Garrosa, E. et al. (2020). Personal resources and personal vulnerability factors at work: An application of the Job Demands-Resources model among teachers at private schools in Peru. *Current Psychology*. № 39. P. 325–336 [in English].
3. Gallant, A., Riley, P. (2014). Early career teacher attrition: new thoughts on an intractable problem. *Teacher Development*. № 18. P. 562–580 [in English].
4. Gu, Q., Li, Q. (2013). Sustaining resilience in times of change: Stories from Chinese teachers. *Asia-Pacific Journal of Teacher Education*. № 41 (3). P. 288–303 [in English].
5. Kelly, N., Sim, C., Ireland, M. (2018). Slipping through the cracks: teachers who miss out on early career support. *Asia-Pacific Journal of Teacher Education*. № 46. P. 292–316 [in English].
6. Khoshaba, D., Maddi, S. (1994). Hardiness and Mental Health. *Journal of Personality Assessment*. Vol. 63. No 2. P. 265–274 [in English].
7. Maddi, S.R., Harvey, R.H., Khoshaba, D.M., Fazel, M., & Resurreccion, N. (2009). The Personality Construct of Hardiness. *Journal of Humanistic Psychology*. 49 (3). P. 292–305 [in English].
8. Osadchyi, V., Varina, H., Falko, N., Osadcha, K., & Katkova, T. (2021). The peculiarities of the usage of AR technologies in the process of hardiness of future professionals. *Journal of Physics*. 1840 (1) [in English].
9. Wang, Y. (2021). Building Teachers' Resilience: Practical Applications for Teacher Education of China, *Frontiers in Psychology*. *Frontiers in Psychology*. № 12. P. 738606 [in English].