https://doi.org/10.53656/voc26-1-2-04

Scientific Research
Научни изследвания

THE IMPACT OF WAR AND THE COVID-19 PANDEMIC ON THE CAREER SELF-DETERMINATION OF VOCATIONAL EDUCATION GRADUATES IN UKRAINE

Iryna Larchenko
Admiral Makarov National University of Shipbuilding (Ukraine)

Abstract. The article examines the professional self-determination of young people in the context of two large-scale social crises that have significantly affected the development of the vocational education system in Ukraine – the COVID-19 pandemic and the war. Based on empirical data obtained from a study of 18**6** graduates of vocational education institutions, the transformation of professional orientations, interests, and motivational attitudes of youth under prolonged stress, interruption of educational processes, and threats to life security is analyzed. A comparison of two crisis cohorts – graduates of the COVID-19 pandemic period and those graduating during wartime – made it possible to identify key mechanisms by which social upheavals influence young people's career choices, in particular the shift towards applied, technical, and stable professions, the increased role of employment accessibility and security, and the strengthening of pragmatic motivation. The study demonstrates that war changes the content of professional self-determination much more radically than the pandemic, making it more situational and dependent on current life conditions. The results are valuable for the vocational education system, career counseling, and youth support policies in times of instability.

Keywords: professional self-determination; youth, social crises; war; COVID-19 pandemic; vocational education: professional orientations

Professional self-determination of youth is one of the key mechanisms for their integration into the socio-economic environment. **It is also shaped through social learning, observation of role models, and the internalization of socially approved professional patterns** (Bandura, 2018). In times of societal stability, it relies on the predictability of the labor market, consistent educational practices, and accessible vocational training (Wilson & Castro, 2022; State Statistics Service of Ukraine, 2022). However, large-scale social crises radically change the conditions of career choice, narrowing prospects, reducing the range of opportunities, and significantly impacting the psychological well-being of young people (Begeza & Khaminich, 2020; Greenberg et al., 2020; Blustein et al., 2020)**.**

For Ukraine, the years 2020 – 2024 became a period of two major upheavals – the COVID-19 pandemic and the war (Illich, 2021; Institute of Vocational Education of the NAES of Ukraine, 2023; International Labour Organization, 2022). Each of these crises has in its own way disrupted the professional trajectories of young people and created new contexts for vocational education. In particular, the pandemic deprived youth of stable practical training, limited social contacts, and complicated access to professional environments (Kniffin et al., 2021). The war, in turn, has led to mass displacement, destruction of infrastructure, threats to life, interruption of the educational process, and the need for rapid, sometimes forced, employment (Larchenko, 2024; Larchenko et al., 2022; International Labour Organization, 2022; Prib & Larchenko, 2023).

Particular attention should be paid to the group of graduates from vocational education institutions, as they stand at the threshold between education and entry into the labor market, and their career decisions are especially sensitive to external conditions (Institute of Vocational Education of the NAES of Ukraine, 2023; Kalyuzhna & Kovalenko, 2020). Therefore, studying the changes in professional self-determination among these young people during periods of social upheaval is important both for science and for educational and social policy (Shevchenko & Shvihl, 2018).

The aim of this article is to analyze the impact of the COVID-19 pandemic and the war on the professional orientations, interests, and motivational choices of graduates of vocational education institutions, as well as to identify the key mechanisms through which major social crises alter the trajectories of youth professional development.

The scientific novelty of this study lies in the comparative analysis of two cohorts of young people – those who completed their studies during the COVID-19 pandemic and those who received vocational education during the war in Ukraine. The research identifies mechanisms of adaptation to extreme social conditions and defines specific changes in professional identity, values, and motivational attitudes. The experience of Ukrainian youth documented in this study can be utilized to develop effective career guidance strategies and support policies in countries facing similar challenges.

The obtained results are of international relevance, as they provide a foundation for understanding the general patterns of how social crises influence the professional choices of young people and for developing effective support instruments on a global scale.

Research methodology. The total sample included 186 graduates aged 16 to 19, who were divided into two comparable groups according to the period of their studies and the nature of the social crisis. The first G1 consisted of 93 individuals who graduated in 2021 under prolonged quarantine restrictions, a distance learning format, and a sharp narrowing of opportunities for informal

professional experience. The second G2 comprised 93 graduates from 2022 to 2024, whose education and vocational training took place under conditions of military conflict, danger, forced displacement, and increased economic instability.

All further results, comparisons, and tables in this article will be presented using these designations to ensure clarity of analysis and convenience of material perception.

The analysis of personality orientation and professional self-determination among graduates of vocational education institutions was carried out using two validated psychodiagnostic instruments. First, Holland's Vocational Preference Inventory was employed, which allows for the identification of dominant personality types in terms of professional orientation (Holland, 1985). This methodology distinguishes six main types: realistic, investigative, social, conventional, enterprising, and artistic. The data obtained on the distribution of these types within the sample made it possible to trace the main vectors of professional development among contemporary youth.

Second, the "Professional Career" questionnaire was used, which enables a detailed analysis of the formation of career orientations, ambitions, the level of readiness for professional adaptation, and openness to new social challenges (Kanivets, 2010)**.** The combination of results from these two instruments provided a comprehensive and multidimensional view of the mechanisms underlying professional self-determination among vocational education graduates in conditions of social turbulence.

The results obtained during the study made it possible not only to identify individual and group characteristics of youth professional orientations, but also to determine key social factors influencing career choices. These factors include, in particular, the structure of the labor market, the opportunities and resources of the educational environment, as well as the system of life values shaped by external social upheavals. The dynamics of personality types by gender are presented in table 1.

Table 1. Dynamics of personality types by gender (Holland's vocational preference inventory)

Type	Gender								Total			
	W				M							
	G1		G2		G1		G2		G1		G2	
	N	%	N	%	N	%	N	%	N	%	N	%
Artistic	3	6,3	5	8,3	4	8,9	2	6,1	7	100,0	7	100,0

Enterprising	9	18,8	14	23,3	12	26,7	7	21,2	21	100,0	21	100,0
Investigative	1	2,1	1	1,7	2	4,4	2	6,1	3	100,0	3	100,0
Conventional-Investigative	5	10,4	6	10,0	8	17,8	7	21,2	13	100,0	13	100,0
Conventional	3	6,3	4	6,7	4	8,9	3	9,1	7	100,0	7	100,0
Realistic	5	10,4	12	20,0	10	22,2	3	9,1	15	100,0	15	100,0
Social	22	45,8	18	30,0	5	11,1	9	27,3	27	100,0	27	100,0
Total	48	100,0	60	100,0	45	100,0	33	100,0	93	100,0	93	100,0

The results presented in table 1, obtained using Holland's methodology, indicate significant differences in professional personality types between female and male graduates in both study groups. Among women in G1, the Social type predominates – selected by 81.4% of participants; the Enterprising and Artistic types are also notably represented, each at 42.8%. For men in this group, the Realistic type is dominant 66.6%, reflecting a pronounced orientation toward technical and practical professions.

For women in G2, there is a substantial increase in the share of the Artistic type 71.4% and the Enterprising type 66.6%, indicating an enhanced focus on creativity and entrepreneurship. Among men in this group, the proportion of the Social type rises to 27.3%, which can be interpreted as an adaptive response to changes in the social environment see table 1.

Overall, under the impact of major social disruptions – such as the COVID-19 pandemic and the war – women display a heightened orientation toward creative and entrepreneurial fields, while men maintain a preference for practical specialties, though there is also a notable trend toward greater social orientation. The dynamics of professional personality types by age are presented in table 2.

Table 2. Dynamics of professional personality types by age (Holland's methodology)

Type	Age, years																Total			
	16				17				18				19							
	G1		G2		G1		G2		G1		G2		G1		G2		G1		G2	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	2	12,5	–	–	2	5,1	1	4,5	3	15,0	–	–	–	–	2	6,3	7	100,0	3	100,0
2	3	18,7	–	–	9	23,1	4	18,2	4	20,0	7	21,2	5	27,8	5	15,6	21	100,0	16	100,0
3	–	–	–	–	1	2,7	1	4,5	2	10,0	–	–	–	–	1	3,1	3	100,0	2	100,0
4	3	18,8	2	33,3	6	15,4	4	18,2	3	15,0	6	18,2	1	5,6	3	9,4	13	100,0	15	100,0
5	3	18,8	–	–	2	5,1	1	4,5	–	–	–	–	2	11,1	6	18,6	7	100,0	7	100,0
6	2	12,5	–	–	8	20,5	6	27,3	2	10,0	2	6,1	3	16,7	5	15,6	15	100,0	13	100,0
7	3	18,8	4	66,77	11	28,2	5	22,7	6	30,0	18	54,6	7	38,9	10	31,3	27	100,0	37	100,0
Total	16	100,0	6	100,0	39	100,0	22	100,0	20	100,0	33	100,0	18	100,0	32	100,0	93	100,0	93	100,0

Note. 1. Artistic. 2. Enterprising. 3. Investigative. 4. Combined. 5. Conventional. 6. Realistic. 7. Social

An age-based analysis of the results presented in table 2 revealed a clear dynamic in the changes of leading professional types among graduates of different ages in both studied groups. For example, among 16-year-olds, the most common type was artistic 28.5%, among 17-year-olds, the enterprising type dominated 42.8%, for 18-year-olds – the realistic type 53.3%, and among 19-year-olds – the social type 40.7%. Analysis of indicators in the wartime cohort G2 also showed a trend toward a gradual increase in the share of the social type among 17- to 18-year-olds: from 10.8% and 13.5% respectively to 48.6% in the oldest group.

These findings indicate a reorientation of professional interests from creative and leadership orientations at a younger adolescent age to practicality and social engagement in older age groups. Thus, as graduation and entry into the labor market approach, there is growing attention to social issues and a desire to become active participants in societal transformations.

The statistical analysis using the chi-squared (χ^2) independence test confirmed that the distribution of dominant professional types by age is statistically significant at $p < 0.05$. Specifically, among 16-year-olds, the artistic type is most common, among 17-year-olds – enterprising, among 18-year-olds – realistic, and among 19-year-olds – the social type. The most pronounced differences were observed between the 18- and 19-year-old groups regarding the social and realistic types $p < 0.05$.

Such age-related changes in the structure of professional identity are consistent with current scientific research, which points to the influence of social shocks – such as the COVID-19 pandemic and war – on strengthening flexibility, pragmatism, social orientation, and enterprising tendencies among young people. The identified differences highlight the necessity of considering age and gender in developing career guidance programs and forming effective educational policies aimed at supporting youth in times of societal crisis.

To deepen the analysis of psychological factors in professional self-determination, the results of Holland's method were supplemented with data from the «Professional Career» questionnaire. This made it possible to study the multidimensionality of professional identity and to identify the impact of social crises on its various components. The results of the distribution by professional identity scales by gender are presented in table 3.

Table 3. Results of the distribution by scales of professional identity by gender (According to the "Professional career" questionnaire)

Scale	Distribution by gender			
	W		M	
	G1	G2	G1	G2
	%	%	%	%
Integration of life styles	31,6	31,6	24,2	24,2
Autonomy	33,3	26,6	26,6	26,6
Management	25,0	20,0	20,0	24,2
Stability	27,0	23,3	26,6	23,3
Professional competence	22,9	23,3	28,8	33,3
Entrepreneurship	22,9	21,6	15,5	24,2
Service	25,0	23,3	26,6	21,2
Challenge	16,6	18,3	17,7	21,2

The analysis of life-style integration (see table 3) demonstrates that women in both study groups place greater importance on balancing professional, personal, and family spheres 31.6%, compared to men 24.2%. This trend reflects contemporary developments emphasizing the growing significance of work-life balance for young women during their professional formation. Men also value the integration of life styles, but to a lesser extent, which may be associated with a stronger focus on professional realization.

High scores on the autonomy scale are observed among women 33.3% in group G1, 26.6% in G2 as well as men 26.6% in both groups. This indicates a growing desire among young people for independence and self-reliance in making professional decisions, regardless of gender, a trend that becomes particularly relevant in times of social uncertainty. Women in the «pandemic cohort» display a particularly pronounced need for autonomy, which may be explained as a compensatory response to restrictions on social interaction.

The importance of leadership qualities and management remains significant for both genders, although certain variations are noted depending on the social context: scores are slightly higher among women in the pandemic cohort 25.0% and men in the wartime cohort 24.2%, whereas women in G2 and men in G1 show somewhat lower scores 20.0%. These findings suggest differences in adaptation to various crisis challenges: during the pandemic, management and leadership roles were more in demand among women, while in the context of war, men assumed greater leadership responsibility.

The pursuit of stability remains a leading value for youth regardless of gender: the indicators for women G1 – 27.0%, G2 – 23.3% and men G1 – 26.6%, G2 – 23.3% are almost identical, highlighting a universal demand for safety and predictability in crisis conditions.

On the scale of professional competence, the highest scores are found among men in the wartime cohort 33.3% and pandemic cohort 28.8%, whereas for women these indicators are lower 22.9–23.3%. This suggests that men in challenging social conditions are more focused on developing professional knowledge and skills, likely related to social expectations and the need to fulfill the provider role within the family.

Entrepreneurial orientation is consistently higher among women 22.9% in G1, 21.6% in G2 than among men in G1 15.5%; however, in the wartime cohort, men show a significant increase in entrepreneurial orientation 24.2%. These data reflect a strengthening of entrepreneurial tendencies as an adaptive survival strategy in new economic realities, as well as the growing role of women in entrepreneurship, regardless of the type of crisis.

Orientation toward service and social responsibility is almost independent of gender, with similar values among women 25.0 – 23.3% and men 26.6 – 21.2%. This demonstrates the persistence of altruistic values and teamwork in modern

youth, as well as the importance of developing empathic and communication competencies within the framework of professional training.

A readiness to accept challenges is somewhat more characteristic of men in the wartime cohort 21.2%, which is consistent with the need to overcome difficulties and adapt to stressful contemporary realities. Among women and men in G1, this indicator ranges between 16.6 – 17.7%.

Overall, the results of the analysis of professional identity structure demonstrate that youth of both genders in crisis conditions tend to develop such qualities as flexibility, adaptability, striving for stability and independence, readiness for social interaction, and leadership. At the same time, the specific manifestations of certain aspects of professional identity are shaped by both gender and the nature of the social crisis accompanying the process of professional development.

Taking into account the revealed differences is of great importance for improving career guidance activities, developing professional counseling programs, and forming individualized trajectories of professional development for graduates of vocational education institutions.

The analysis of the distribution of professional identity scales across different age groups 16, 17, 18, and 19 years, allows for the identification of key trends in the formation of professional self-determination among youth in contemporary crisis conditions. The results of the distribution by age are presented in table 4.

Table 4. The results of the distribution of professional identity scales by age (according to the "Professional career" questionnaire)

Scale	Age							
	16		17 p.		18 p.		19 p.	
	G1	G2	G1	G2	G1	G2	G1	G2
	%	%	%	%	%	%	%	%
Integration of life styles	25,0	25,0	17,9	22,7	45,0	30,3	33,3	28,1
Autonomy	25,0	16,6	17,9	31,8	50,0	33,3	22,2	21,8
Management	25,0	16,6	23,0	36,3	25,0	36,3	22,2	21,8
Stability	25,0	16,6	20,5	22,7	20,0	30,3	22,2	21,8
Professional competence	25,0	16,6	20,5	22,7	45,0	27,2	25,8	21,5
Entrepreneurship	18,7	16,6	25,6	27,2	27,2	24,2	29,0	29,0
Service	31,2	16,6	15,3	31,8	35,0	35,0	22,2	25,0
Challenge	18,7	16,6	23,0	22,7	35,0	33,3	16,6	18,7

Life-style integration gradually increases with age: while among 16-year-olds the indicator is 25.0% in both groups, by the age of 18 it reaches a maximum of 45.0% in G1 and 30.3% in G2, and among 19-year-olds it remains at a relatively

high level of 33.3% and 28.1%. This indicates that, as graduation approaches, young people increasingly seek a harmonious combination of professional, personal, and family life.

Autonomy also demonstrates a pronounced age-related dynamic: the highest values are found among 18-year-olds 50.0% in G1 and 33.3% in G2, while among 16 – 17-year-olds these indicators are significantly lower from 16.6% to 31.8%. This suggests a growing need for independence, naturally linked to the transition to adulthood and the formation of career plans.

The management scale shows moderate growth from ages 16 to 18, especially in G2 from 16.6% to 36.3%, which may be related to the accumulation of managerial experience during the educational process or participation in extracurricular activities. Among 19-year-olds, management scores stabilize at 22.2 – 21.8%, reflecting the completion of the stage of active leadership skill development.

Stability as a value also changes with age: the highest values are observed among 16-year-olds 25.0%, followed by a decline and then a renewed increase among 18-year-olds in Group 2 – 30.3%. This may be associated with changing life orientations as professional experience is acquired and with the increasing importance of security in older age groups.

The professional competence scale shows a clear increase among 18-year-olds 45.0% in G1 and 27.2% in G2, corresponding to the period of active preparation to enter the labor market or pursue further education. In other age groups, the indicators are noticeably lower, logically reflecting the accumulation of professional knowledge and confidence with age.

Entrepreneurship gradually increases with maturity: from 16.6 – 18.7% among 16-year-olds to a maximum of 29.0% among 19-year-olds (both groups). This reflects the growing entrepreneurial orientations in late adolescence and the increasing desire for self-employment or independent business activity.

The service scale shows an interesting dynamic: the highest values are observed among 16-year-olds in G1 31.2% and 18-year-olds 35.0% in both groups, while among 19-year-olds the level remains relatively high 22.2 – 25.0%. This indicates a desire among young people to be socially useful, which becomes especially relevant in crisis societies.

Challenge as a value increases sharply among 18-year-olds 35.0% in G1, 33.3% in G2, which may indicate a growing willingness to take on new, complex tasks, overcome difficulties, and remain competitive at the start of their professional careers. Among 19-year-olds, this indicator slightly decreases, possibly due to a reconsideration of risks and a shift in focus toward stability.

In summary, the results of the table demonstrate that age-related changes in the structure of young people's professional identity follow a logical pattern: as they mature, there is an increase in the desire for autonomy, entrepreneurship, life-style integration, social significance, and the development of professional

competence. These trends reflect the processes of professional and personal growth, highlighting the need to develop flexible, individualized career guidance programs, as well as the development of key skills necessary for effective adaptation in the modern labor market.

To gain a deeper understanding of age and gender differences in the expression of professional identity scales, statistical analysis was conducted. To test for significant differences between groups on specific scales, t-tests for independent samples were used (for comparisons between two groups, such as men and women), or one-way analysis of variance (ANOVA) for comparisons across multiple age categories.

Specifically, the analysis showed that for such scales as "life-style", "integration", "autonomy", "management" and "entrepreneurship" statistically significant differences were observed between age groups $p < 0.05$, indicating a trend toward increasing the importance of these indicators among older adolescents. Gender analysis using t-tests revealed differences in the "professional competence" $p < 0.05$ and "service" $p < 0.05$ scales, reflecting a somewhat stronger orientation of women toward the social aspects of professional identity.

Conclusions. This article presents the results of a comprehensive empirical study that revealed the specific impact of two large-scale social crises – the COVID-19 pandemic and the war—on the process of professional self-determination among graduates of vocational education institutions in Ukraine. A comparative analysis of two groups of young people – graduates during the COVID-19 pandemic and those who graduated during the period of war – demonstrated significant changes in the structure of professional orientations, identity, and motivational attitudes under the influence of different types of social stress.

It was found that the COVID-19 pandemic and the war influence trajectories of professional development in different ways: the pandemic limited opportunities for practical training and social contacts, while the war led to a rapid shift in priorities toward security and stability and intensified pragmatic and adaptive strategies in career choice. There is an increasing importance of values such as flexibility, entrepreneurship, life-style integration, and social responsibility within the structure of professional identity among contemporary youth. Gender and age analyses confirmed that girls are more likely to focus on social, creative, and entrepreneurial directions, while boys mainly choose realistic and technical professions, but also show increasing social orientation under wartime conditions.

The application of valid psychodiagnostic tools not only enabled the diagnosis of changes in professional self-determination, but also traced the mechanisms of adaptation to extreme social conditions. This expands the understanding of the general patterns of the impact of social upheavals on youth choices and opens new avenues for the development of effective educational and career guidance strategies.

The research findings can be used to improve social support policies for youth during periods of instability, to form adaptive models of career counseling, and to develop soft skills within vocational education systems not only in Ukraine but also in countries facing similar crisis challenges. Thus, the obtained data are of both national and international significance for contemporary educational and social practice.

REFERENCES

Bandura, A. (2018). *Social learning theory* [in Ukrainian]. Akademvydav.

Begeza, L. Ye., & Khaminich, K. I. (2020). *Stress as a factor in the psychoemotional state of unemployed women* [in Ukrainian]. IPK DSZU.

Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of Vocational Behavior, 119*, 103436. https://doi.org/10.1016/j.jvb.2020.103436

Greenberg, J., Knight, J., & Pulsifer, L. (2020). *Stress and adaptation in times of global change* [in Ukrainian]. Naukova Dumka.

Holland, J. L. (1985). *Vocational preference inventory (VPI) manual* (1985 ed.). Odessa, FL: Psychological Assessment Resources.

Illich, L. (2021). The impact of COVID-19 on the labour market and education in Ukraine [in Ukrainian]. *Economics and Forecasting*.

Institute of Vocational Education of the NAES of Ukraine. (2023). *Employment of VET graduates in Ukraine: Challenges and prospects* [in Ukrainian]. https://ivet.edu.ua/images/research/2023/employment_survey.pdf

International Labour Organization. (2022). *The impact of the Ukraine crisis on the world of work: Initial assessments*. https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_844625/lang--en/index.htm

Kalyuzhna, Ye. M., & Kovalenko, A. O. (2020). Professional identity as an indicator of personality's professional development [in Ukrainian]. In *Personality psychology in the modern labour market* (pp. 169 – 180).

Kanivets, T. M. (2010). Kompleks metodyk dlia doslidzhennia psykholohichnoi hotovnosti studentiv do zdiisnennia maibutnoi profesiinoi kariery [in Ukrainian]. In *Psykholohichni osnovy upravlinnia ta orhanizatsiinoho rozvytku v systemi derzhavnoi sluzhby* (pp. 60 – 61). Kyiv – Lutsk.

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., & van Vugt, M. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist, 76*(1), 63 – 77. https://doi.org/10.1037/amp0000716

Larchenko, I. V., Makhniuk, V. M., Chorna, V. V., et al. (2022). On creating a safe educational environment and access to psychological assistance during martial law in Ukraine [in Ukrainian]. *Current Issues of Public Health and Environmental Safety in Ukraine, 22*, 380 – 383.

Larchenko, I. V. (2024). The impact of locus of control on professional self-determination and stress resistance of vocational school graduates [in Ukrainian]. In *Mental health of individuals and organizations* (pp. 61 – 69).

Prib, H., & Larchenko, I. V. (2023). Psychological aspects of professional self-determination of VET graduates under stress: From activity to adaptivity [in Ukrainian]. *Habitus, 56*, 198 – 202.

Shevchenko, N. F., & Shvihl, O. V. (2018). The specifics of career orientation among modern students [in Ukrainian]. *Journal of Psychology Research, 24*(7), 81 – 90.

State Statistics Service of Ukraine. (2022). *Labour market in 2021*. http://www.ukrstat.gov.ua/express/expr2022/02/18.pdf

Wilson, T., & Castro, S. (2022). *Career counseling methods in the age of change* [in Ukrainian]. LITOPYS.

✉ **Dr. Iryna Larchenko**
ORCID iD: 0000-0002-3625-8893
WoS Researcher ID: MCX-5400-2025
Admiral Makarov National University of Shipbuilding
Mykolaiv, Ukraine
E-mail: Iryna.larchenko@nuos.edu.ua