# TIME PERSPECTIVE OF FORCED MIGRANTS WITHIN THE NATIONAL BOUNDARIES AND ABROAD

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#### ABSTRACT

Aim. The aim is identification of differences in organisation of time perspective in forced migrants within the national boundaries and beyond the country under martial law in relation to prolonged psychological stress and steady changes in mental states.

**Methods.** There were 136 young and middle-aged research participants: 59 forced migrants in Ukraine (Group 1) and 77 forced migrants staying abroad (Group 2). The methods used: "Time Perspective Inventory" (Zimbardo & Boyd, 1999); the scale "Time Competence" from the test determining an individual's self-actualisation (Shostrom, 1964); the Freiburg Personality Inventory (FPI, Form B) (Fahrenberg, Hampel & Selg, 2010).

**Results.** The Mann-Whitney U-test allowed establishing the advantage of Group 2 over Group 1 by the parameters: "negative past" (U=1781.00; p=.031); "hedonistic present" (U=1620.00; p=.004); "fatalistic present" (U=1560.00; p=.002), and also the advantage of Group 1 over Group 2 by the parameters: "neuroticism" (U= 1715.50; p = .013); "sociability" (U= 1464.50; p < .001); "openness" (U= 1277.00; p < .001); "extraversion" (U= 1458.50; p < .001).

**Conclusions.** Forced migrants try to orientate themselves towards the future and the positive past. Having a high level of neuroticism and openness to the surrounding, forced migrants in the country under martial law are characterised by disrupted balance of time orientations, and also reduced time orientations towards the hedonistic present, towards negative memories and expectation of fatal changes in the situation. The balance of time orientations of forced migrants staying abroad is close to the level which corresponds to the state of psychological well-being.

**Keywords:** time orientation, stress, identity, personal resources, mental state, psychological well-being, past experience, military operations.

## INTRODUCTION

Intensive migration processes have occurred throughout the known history of humanity. Individuals, families and entire communities have changed their residence for different reasons. These reasons involved personal and socially important aims, professional necessity, social problems, natural disasters, obvious climatic change, man-made disasters and wars. But in any case, migrants lose something in the past and hope for probable improvement in the future. However, their personal expectations and predictions about the future do not often match the reality. Hanna Hromova (2022) thinks that uncertainty of a future perspective always remains one of the key factors in making decisions in critical situations, in the situations of impact of different stressors.

In any case, migration has its own specificity and features for each individual or group of people. The long-term military operations in Ukraine have made millions of people change their residence and migrate within the national boundaries and abroad. In the current critical situation, the main reason for migration is a serious threat to life and health. Neil Schneiderman et al. (2005) think that other specific stressors are also important for the formation of stress in forced migrants. Such stressors include substantial losses of material resources and accommodation, complication of the current life support, considerable restrictions concerning professional self-realisation and employment, a change in a usual socio-cultural environment, uncertainty of organisation of life activity in the future.

Migration within the national boundaries and migration beyond the country are noticeably different in their conditions, requirements and opportunities for Ukrainian forced migrants. The differences also concern material conditions, socio-cultural circumstances and self-identification in relation to the future prospects.

A new socio-cultural environment and new financial-economic relations are among the major stresses for most migrants abroad. The research on adaptation of Iraqi forced migrants in Australia conducted by Maria Gabriele Uribe Guajardo et al. (2016) is informative in this aspect. The researchers found that the level of psychological stress in many Iraqi migrants, who stayed in new places and living conditions for a long time, was much higher than in the newcomers. However, in spite of the given results, the living conditions in modern European countries are not absolutely new for many Ukrainian forced migrants. The modern mass media, especially Internet, offer different opportunities for thorough preliminary acquaintance with different countries. In addition, close economic and cultural relations in the world contribute to certain unification of processes in many areas of human activity, especially in western countries. Migrants from Ukraine, having suffered substantial material losses, received significant financial and social support, relatively comfortable accommodation in the places of their temporary residence abroad. Moreover, Ukrainian migrants are offered employment opportunities, options of further professional self-realisation in the country of residence. Therefore, the present uncertainty and current threats, and also uncertainty of the future for migrants from Ukraine staying abroad are reduced due to resources and stable processes in the countries of their temporary residence.

A threat to life and health still remains one of the most serious stressors for migrants in the territory of Ukraine (Kuzikova et al., 2023; Popovych et al., 2023b). The danger of being injured by modern weapons concerns the entire territory of the country. In addition, many migrants in Ukraine have serious problems with the current financial support and employment along with substantial losses of resources for survival (Blynova et al., 2019; 2022). The social environment under conditions of war is full of anxiety, fear and negative emotional strain. Objective uncertainty of organisation of life activity for most people in Ukraine remains very high.

A specific complex of stressors arises for Ukrainian migrants, having common essential problems and problems dependent on the place of residence (Andrushko, 2023; Blynova et al., 2020). In addition, prolonged stress and noticeable exhaustion of internal personal and physical resources for adaptation become an important factor of impact on everyone suffering from the war. An increase in the symptoms of distress, stable negative mental states, obvious manifestation of psycho-somatic diseases can be observed in a considerable portion of migrants.

The impact of numerous stressors and various manifestations of stress in forced migrants indicate the appropriateness of considering the above psychological problems from different conceptual perspectives. A serious and long-lasting threat to life and health of an individual determines the necessity of establishing their general adaptation potentials and assessing their stress-resistance. Long-term resistance to the impact of powerful stressors requires a large expenditure of different resources of the body and psyche, as was proved in the concept by Hans Selye (1975). The situation for forced migrants in the aspect of necessary adaptation resources gets more complicated because the resources of stress-resistance in most of them were spent on fighting against diseases at the time of the previous COVID-19 pandemic (Pfeifer et al., 2021). The fear of falling ill, diseases themselves, harsh conditions of the quarantine, expenses for medical treatment, weaker health after treatment, social tension – all these have had a negative effect on stress-resistance of a considerable portion of the world population. Under these conditions, Ukrainian forced migrants faced new existential trials by the war. The outlined circumstances make a considerable contribution to an increase in probability of a breakdown in defense mechanisms of the victims' body and psyche, development of distress and intensification of negative mental states (Selye, 1975).

Determining personal resources and cognitive evaluation of their sufficiency for coping with a stressogenic impact is one of the key aspects in the concept of stress by Richard S. Lazarus and Susan Folkman (1987). Resource support of stress-resistance in Ukrainian forced migrants has specific characteristics. These characteristics mainly concern substantial material losses, a change in their socio-cultural environment, motivational and emotional exhaustion. A loss of property and accommodation, problems with financial support – all these require migrants to make additional efforts for satisfying the current basic physiological needs. A forced change in a socio-cultural environment affects satisfaction of the current needs for communication, the choice of a social and language environment for the future. This aspect mainly distinguishes migrants within the national boundaries from migrants abroad. Emotional and motivational exhaustion has an impact on the level of activeness and persistence in solving important problems of survival, requires additional volitional efforts and energetic search of a reliable meaningful foundation for further full-fledged life, as Viktor E. Frankl (1992) emphasized.

Additionally, the existential crisis of adequacy of the worldview formed during the entire previous life becomes one of the most serious stressors of cognitive nature for the majority of people suffering from the war. In this case, the structured past of an individual suddenly faces tragic challenges of the present. The result of this conflict affects the current actions and determination of a probable future perspective, and also reconstruction of the entire time perspective of an individual's life activity with reconsideration and reformation of the present and the past. When external resources of stress-resistance are significantly limited, particular compensation is possible due to an increase in internal resources of an individual. However, forced migrants also have a problem in this aspect as well. In the situations of life crises, people resort to revaluation of their own past to reconsider positive experience to rely on in organisation of the future (Seligman & Csikszentmihalyi, 2014; Seligman et al., 2004). Forced migrants try to increase their self-efficacy as a resource for coping with stress under critical conditions with different results Albert Bandura (1977). However, an individual whose worldview is destroyed and whose value of past achievements is reduced, finds difficulties in professional self-realisation, faces the necessity to reject many stereotypes, strategies, methods and habits in organisation of life activity formed in the past, low self-esteem and confidence in their experience. Forced migrants experience an existential crisis and, when solving it, overcome uncertainty of all time perspectives. Viktor E. Frankl (1992) thought that, under such conditions, the time perspective of life activity or the notion of the process of life development radically change.

Components of an individual's time perspective, combining the past, present and future in different aspects, can emerge in different combinations and connections according to the circumstances. Stable negative mental states cause disruption of the integrity and continuum of time perspective and the flow of psychological time, actualisation of negative memories and restriction of a future perspective (Plokhikh, 2022; 2023; Plokhikh et al., 2021; 2023). It was found that certain configurations of time orientations are related to the opportunity to plan and organise behaviour, to a positive attitude of an individual (Bajec, 2019; Kobylarek, 2019; Przepiorka et al., 2020). It is thought that a balanced combination of distinct time orientations towards the positive past, the hedonistic present and the future is related to an individual's achievement of psychological well-being (Zimbardo & Boyd, 1999). However, a desirable state of the best coordination of the mental dynamics of an individual's actions with the dynamics of a situation, given the key content aspects of reality, is regarded as a flow state or the state of full-fledged presence at the current moment of significant changes (Lavoie et al., 2022; Shepherd, 2022). As for the latter, configuration of the components of a continuous flow state is difficult to determine or rather impossible. The state of the fullest consistency with reality makes a subject reveal new opportunities in a long-term controlled process and receive an additional powerful resource for solving important problems (Cheban et al., 2020; Plokhikh, Popovych, Koval et al., 2022).

The impact of the above stressors of war not only determines mental and physical states, but also originally reflects in organisation of time perspective of forced migrants. It especially concerns the factors of uncertainty of the present and the future, a change in the significance of a considerable portion of the past experience, depletion of resources for dynamic actions. The specificity of stressogenic circumstances for forced migrants in their native country and abroad must overlap with organisation of their time perspective.

The research aim is to find differences in organisation of time perspective in forced migrants in Ukraine and beyond the boundaries of the country under martial law in relation to prolonged psychological stress and steady changes in mental states.

The research hypothesis – an important consequence of a long-term effect of stressors related to threats to life, a loss of substantial material resources, uncertainty of a future perspective is more distinctive development of negative mental states and unbalanced time perspective of life activity in forced migrants in the territory of the country under martial law in comparison with forced migrants staying abroad.

## **METHODS**

## Methodology

The methodological foundation for organisation of the empirical research comprised the main ideas of a systemic approach, the concept of time perspective and the concept of the length of a moment in arrangement of psychological time, the concept of stress by Hans Selye (1975) and Richard S. Lazarus and Susan Folkman (1987), the modern studies on psychological well-being (Karpenko & Klympush, 2023) and temporality of an individual (Nosov et al., 2020; Popovych et al., 2022a; Zavatska et al., 2023).

## **Participants**

Generally, the empirical research involved 136 young and middle-aged participants. Group 1 included 59 forced migrants in the territory of Ukraine (aged: Me = 28.00; min = 18.00; max = 47.00), 29.00 % of them being males. Group 2 included 77 forced migrants from Ukraine staying in the countries of the European Union and North America (aged: Me = 33.50; min = 19.00; max = 48.00), 34.00 % of them being males. Participation in the research was voluntary.

# **Organization of Research**

This empirical research is correlational in terms of its organisational scheme. Given the opportunities of efficient use of new information technologies in research on an individual's stress (Pfeifer et al., 2021), materials for the empirical research were given to the research participants in a distance format. All the research participants were suggested to work with the materials using three standardised test methods. They were sent forms with tables to fill out according to each method and tests with corresponding instructions. The research participants did the tests at any reasonable time and sent

## **Procedures and instruments**

the completed forms to the researcher.

The empirical research demonstrated the specificity of organisation of time perspective of forced migrants (time orientations and coordination of certain attitudes concerning an individual's past, present and, probably, future). Given a long-term effect of stress-ogenic factors and substantial expenses of personal resources for dealing with stressful situations, stable mental states and personal characteristics of individuals were identified.

Time orientations of the research participants were established using "Time Perspective Inventory" (Zimbardo & Boyd, 1999). Theoretical substantiation of the method indicates that five time orientations are crucial for organisation of an individual's life activity, two of them belong to the past (the negative past, the positive past), two of them belong to the present (the hedonistic present, the fatalistic present) and one dimension considers orientation towards the probable future. The obtained initial points for each of them were divided into the number of questions in the corresponding scale of the method for quantitative comparison of distinctiveness of individual time orientations. The measurement range of the methodology scales was from 1.00 to 5.00. Homogeneity of the obtained empirical data by  $\alpha$ -Cronbach was at a high level Group 1 ( $\alpha = .972$ ) and a medium level Group 2 ( $\alpha = .835$ ).

The ability of the research participants to experience the current moment of their life in its completeness, wholeness, consistency and continuum of time dimensions of the past, present and future was established by the parameter "time competence". This parameter relates to one of the two key scales of the test for determining an individual's self-actualisation (Shostrom, 1964). The measurement range for the scale was .00 to 17.00.

According to the necessity of identifying consequences of stress in the forced migrants using the Freiburg Personality Inventory (FPI, Form B) (Fahrenberg et al., 2010), manifestations of stress-resistance and symptoms of distress in stable negative mental states and characteristics of an individual were thoroughly and comprehensively diagnosed. The above mentioned questionnaire allowed diagnosing such characteristics and states as neuroticism, spontaneous aggressiveness, depressiveness, irritation, sociability, emotional balance, reactive aggressiveness, shyness, openness, extraversion, emotional lability and masculinity. The initial points by all the diagnosed parameters obtained in the questionnaire were substituted for standard scores. The level of distinctiveness of stable characteristics and states was determined using standard scores in the following way: from 1 to 3 – low; from 4 to 6 – medium; from 7 to 9 – high. The measurement range of the methodology scales was from 1.00 to 9.00. Homogeneity of the obtained empirical data by  $\alpha$ -Cronbach was at a high level Group 1 ( $\alpha$  = .890) and a medium level Group 2 ( $\alpha$  = .822).

## **Statistical Analysis**

The statistical package IBM SPSS Statistics 20 was used for quantitative analysis of the empirical data. Statistical correlations between psychological variables were established using Spearman's correlation analysis ( $r_s$ ). Comparison of the groups of research participants by individual psychological variables was performed using the Mann-Whitney *U*-test. The correlated samples were compared applying the Friedman's test ( $\chi 2$ ).

## RESULTS

The balance of distinctiveness of all time orientations and the time orientations related to psychological well-being (the positive past, the hedonistic present, the future) was examined in the structures of time perspectives in the groups of research participants using the Friedman's test. Significant differences in the distinctiveness of all time orientations were identified in the internal forced migrants – Group 1 ( $\chi 2 = 100.33$ ; df = 4; p < .001) and in the forced migrants staying abroad – Group 2 ( $\chi 2 = 45.99$ ; df = 4; p < .001). The distinctiveness of orientations towards the positive past, the hedonistic present and the future is significantly different in the internal forced migrants – in Group 1 ( $\chi 2 = 35.48$ ; df = 2; p < .001), whereas in the forced migrants staying abroad – in Group 2, there are quite similar values of the above time orientations ( $\chi 2 = 4.70$ ; df = 2; p = .096).

Statistical differences (the Mann-Whitney U-test) in the distinctiveness of certain time orientations between the groups of research participants were identified (Table 1).

#### Table 1

Statistical comparison (the Mann-Whitney U-test) of the distinctiveness of time orientations of the research participants in Group 1 (n=59) and Group 2 (n=77)

Group	Statistical		<b>Time orientations</b>						
	parameter	Negative past	Hedonistic present	Future	Positive past	Fatalistic present			
1	М	2.65	2.88	3.47	3.33	2.58			
	SD	.65	.53	.48	.45	.60			
	Me	2.70	2.90	3.50	3.30	2.60			
	Min	1.40	1.30	2.23	2.10	1.44			
	Max	4.70	4.00	4.46	4.44	3.90			
2	M	2.90	3.21	3.35	3.36	3.00			
	SD	.79	.73	.67	.71	.84			
	Me	2.90	3.27	3.31	3.33	3.00			
	Min	1.10	1.73	2.00	1.89	1.33			

The Journal of Education Culture and Society №1\_2025

Group	Statistical	Time orientations						
	parameter	Negative past	Hedonistic present	Future	Positive past	Fatalistic present		
	Max	4.70	4.93	4.85	4.78	4.78		
Mann-Whitney	U	1781.00	1620.00	1935.50	2172.50	1560.50		
	Р	.031	.004	.140	.663	.002		

Source: Own research.

In addition, significant statistical differences between the groups were found by the distinctiveness (in standard scores) of a number of personal characteristics and stable states of the research participants (Table 2). Neuroticism and openness in the majority of forced migrants in the territory of Ukraine from Group 1 is at a high level of distinctiveness (Table 1).

#### Table 2

Statistical comparison (the Mann-Whitney U-test) of the distinctiveness of individual characteristics and stable mental states of the research participants in Group 1 (n=59) and Group 2 (n=77)

Group	Statistical parameter	Individual characteristics and stable mental states of the research participants						
	purumeter	Neuroticism	Sociability	Openness	Extraversion			
1	М	5.95	5.90	6.86	4.76			
	SD	2.21	1.41	1.86	1.92			
	Ме	7.00	6.00	8.00	5.00			
	min	1.00	1.00	2.00	1.00			
	max	9.00	9.00	9.00	9.00			
2	М	5.22	4.95	5.06	3.64			
	SD	1.97	1.87	2.35	1.47			
	Ме	5.00	5.00	5.00	4.00			
	min	1.00	1.00	1.00	1.00			
	max	9.00	9.00	9.00	7.00			
Mann-Whitney	U	1715.50	1464.50	1277.00	1458.50			
	Р	.013	< .001	<.001	< .001			

Source: Own research.

A distinctive tendency for an advantage in the parameter "masculinity" (U = 1888.00; p = .088) of Group 2 (Me = 4.00; Mo = 5.00; min = 1.00; max = 8.00) over Group 1 (Me = 4.00; Mo = 1.00; min = 1.00; max = 9.00) was found.

Statistical correlations of time orientations in the structure of time perspective were established individually for the research participants in Group 1 (Table 3) and Group 2 (Table 4). Wholeness and balance of the structure of time perspective by the parameter "time competence" in the groups were mainly at a medium level. Probable loading of time competence in the groups due to intensification of certain time orientations was identified. It was found that "time competence" of the research participants has a significant negative correlation with time orientation towards the negative past in Group 1 (rs = -.520; p < .001), and with time orientation towards the fatalistic present in Group 2 (rs = -.394; p < .001).

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Statistical correlations (by Spearman) of time orientations Group 1 (n=59)

Components of time perspective	Statistical parameter	Negative past	Hedonistic present	Future	Positive past
Hedonistic present	r	.209	1.000		
	$\overset{\circ}{P}$	.112			
Future	r <sub>s</sub>	.081	.112	1.000	
	p	.540	.400		
Positive past	r <sub>s</sub>	.357**	.181	107	1.000
	p	.006	.170	.421	
Fatalistic present	r	.196	.104	041	.267*
	p	.138	.434	.760	.041

*Note*:  $* - p \le .050$ ;  $** - p \le .010$ .

Source: Own research.

#### Table 4

Statistical correlations (by Spearman) of time orientations in Group 2 (n=77)

Components of time perspective	Statistical parameter	Negative past	Hedonistic present	Future	Positive past
Hedonistic present	r <sub>s</sub>	.327**	1.000		
	р	.004			
Future	r <sub>s</sub>	351**	188	1.000	
	р	.002	.101		
Positive past	r <sub>s</sub>	052	.081	.588**	1.000
	р	.655	.485	.000	
Fatalistic present	r	.280*	.027	258*	.051
	р	.014	.817	.023	.661

*Note*: \*  $- p \le .050$ ; \*\*  $- p \le .010$ .

Source: Own research.

Given the natural impact of stress and mental states on cognitive functions of an individual, we established statistical correlations of time orientations of the research participants in Groups 1 and 2 with negative mental states (Table 5). Statistical correlations of time competence, which is sensitive to impacts on wholeness and consistency of organisation of time perspective, with negative mental states of the forced migrants are illustrative in the outlined aspect. Such statistical correlations were established only in the internal forced migrants – Group 1. It was found that the parameter "time competence" in Group 1 has an inverse correlation with the parameters "neuroticism" ( $r_s = -.288$ ; p = .033), "depressiveness" ( $r_s = -.514$ ; p < .001) and "emotional lability" ( $r_s = -.466$ ; p < .001). On the contrary, there was a direct correlation of time competence of the research participants in Group 1 with their emotional balance ( $r_s = .477$ ; p < .001) and masculinity ( $r_s = .467$ ; p < .001).

## Table 5

Statistical correlations (be Spearman) of the components of time perspective with stable mental states of the research participants in Group 1 (n=59) and Group 2 (n=77)

Stable states of an individual	Group	Components of time perspective							
		Negative past		Hedonistic present		Future		Positive past	
		r	р	r <sub>s</sub>	Р	r <sub>s</sub>	р	r <sub>s</sub>	Р
Neuroticism	1	.216	.101	.115	.385	298*	.022	.013	.924
	2	.199	.082	.204	.074	283*	.013	.036	.756
Spontaneous aggression	1	.370**	.004	.228	.083	020	.883	.311*	.017
	2	050	.669	062	.591	051	.660	032	.784
Depressiveness	1	.509**	.000	.079	.553	<b>-</b> .147	.265	.364**	.005
	2	.406**	.000	.225*	.049	387**	.001	010	.932
Irritation	1	.315*	.015	.068	.609	096	.468	.220	.095
	2	056	.627	.118	.306	.026	.824	<b>-</b> .031	.789

*Note*:  $* - p \le .050$ ;  $** - p \le .010$ .

Source: Own research.

## DISCUSSIONS

The losses of material resources, difficulties in professional self-realisation and uncertainty of the future as a consequence of the military operations mainly have a negative impact on all forced migrants. It is quite easy to understand the research participants' desire to keep their minds off the present which is full of losses, threats, dangers and substantial limitations. As a result, orientations towards the expected favorable future and the positive past maintaining optimistic mindset dominate in time orientations in the groups of forced migrants (Table 1). Additionally, according to the obtained results, the groups differ in the balance of time perspective, necessary for psychological well-being, in the parameters "positive past", "hedonistic present" and "future" (Zimbardo & Boyd, 1999). The values of the parameters in the above triad are almost equal in the forced migrants staying abroad – in Group 2, whereas orientation towards satisfaction and comfortable conditions at the current moment is mainly low in the research participants in Group 1. Moreover, orientation towards the hedonistic present in Group 2 prevails over this orientation in Group 1 (Table 1).

The reason for the above differences should be sought in noticeably different conditions of the migrants' experience of disastrous events in the country under martial law and of those staying abroad. Substantial systemic material, social and psychological support in the places of temporary residence is very important for the forced migrants staying abroad in Group 2. There is no direct threat of being injured by weapons and threat because of large-scale destruction of the life support system for the research participants from Group 2. Previously formed stereotypes of organisation of life activity and the worldview are supported by the surroundings and remain active in a cognitive dimension of these research participants. Being more or less familiar with the European reality due to long-term residence in different countries, migrants from Ukraine prove to be quite adaptable in comparison with other forced migrants, for example, from Iraqi to Australia (Uribe Guajardo et al., 2016). New socio-economic and ethno-cultural living conditions appeared to be not very satisfactory, desirable and acceptable for the latter.

The problem of survival in the future does not exacerbate to a critical level for the forced migrants staying abroad in the conditions of a quite stable and favorable socio-economic and cultural environment. The system of organisation of a stable country offers different variants of life construction, the acceptability of which can be evaluated by a conscious individual. The latter can be connected with the established distinctiveness of an inverse statistically significant correlation between time competence of the research participants in Group 2 and their time orientation towards the fatalistic present. In addition, fatalistic mindset in these research participants appeared to be much higher in comparison with the forced migrants in the territory of Ukraine from Group 1 (Table 1).

Substantial losses of resources and a continuous reduction in the living standards, a permanent real threat to life and health due to the military operations, the problem of employment, absolute uncertainty of the future as stressogenic factors have a long-term complex effect on the forced migrants in the territory of the country under martial law. Depletion of vitality and a lower ability to deal with a critical situation caused by distress are noticeable in most research participants from Group 1. It manifests itself in a distinct increase in the values of the stable negative mental state of neuroticism in Group 1, unlike Group 2, (Table 2). At the same time, stable negative mental states (neuroticism and depressiveness) considerably prevent the research participants' time

orientation towards the future (Table 5). The outlined problematic tendency is apparent in the results of the previous research by Viktor Plokhikh (2022).

Negative mental states very often provoke negative thoughts and images in an individual (Pisanski et al., 2018; Popovych et al., 2020b), and positive mental states provoke positive thoughts and images (Popovych et al., 2022b; Popovych et al., 2023a; Vargas-Hernández & Kariyev, 2023; Popovych et al., 2020a; Vargas-Hernández et al., 2023). In turn, thoughts and images themselves contribute to the development of corresponding states (Seligman, & Csikszentmihalyi, 2014; Seligman et al., 2004). When these multidirectional processes form a circle in the succession of realisation in a critical situation, they become an important factor of the impact on an individual's stress resistance and behaviour. Adequate situations and positive images can contribute to actualisation of additional subjective resources for action, increase stress resistance and encourage migrants to overcome difficulties (Halian et al., 2021; Khraban & Silko, 2022). Negative images and fears impair mental balance, cause depletion and inactivation of mental resources, dampen an individual's will, disorientate in the directions of making efforts (Beck et al., 2004). As a result, the research participants in Group 1 try to restrict manifestations of negative memories and hedonistic mindset under conditions of long-term tension and search of opportunities for survival, even in comparison with Group 2, (Table 1).

The obtained empirical data show that the forced migrants within the national boundaries actively search for additional external and internal resources to resist the stress of war. The research participants in Group 1 are much more open and expansive, in comparison with the research participants in Group 2, (Table 2). This openness mostly concerns social relations, that correspond to manifestations of coping strategies oriented towards social support proved by Viktor Plokhikh (2023). Distinctive reliance of forced migrants within the national boundaries on social support also manifested itself as a main factor of activation of their dispositional mental states, as shown in the study by Anastasiia Kurova et al. (2023). However, when it comes to social support favorable for coping with stress, there arises a problem of sufferers' readiness to provide assistance to others. Under conditions of reduced external adaptation resources, the latter mainly concerns strengthening internal (personal) resources for coping with stress.

Given the obtained empirical data, we can state that the examined forced migrants in the territory of Ukraine are ready for seeking and activating hidden personal capacities. A significant direct statistical correlation of time orientations towards the positive past and the negative past in Group 1 is considered to be illustrative in this aspect (Table 3). Such a correlation does not seem characteristic, given the conditions of the optimal balance of time perspective components (Zimbardo & Boyd, 1999). It is necessary to strengthen time orientation towards the positive past instead of the negative past for less psychological tension and the formation of a sound background for identifying and achieving the desirable future, as in the case of the research participants in Group 2, (Table 4).

Under conditions of a long-term impact of stressors with a high probability of psychological exhaustion in distress, the balance of time orientations which is desirable in terms of well-being, is fragile and depends on an individual's balance on the whole, their ability to perform efficient self-regulation and self-recovery. An increase in the number of negative impressions of long-lasting military operations, and the connection of these impressions with negative mental states is quite understandable. The latter also manifested itself in the results of Group 1 (Table 5). However, when the distinctiveness of negative mental states in this group increases, orientation towards the positive past becomes stronger. At first sight, the latter contradicts the previously discussed correlations between emotional colour of mental states and thoughts. At the same time, the processes of seeking personal resources by individuals who have been under pressure of stressors for a long time, look a bit different, if we consider their reevaluation of memories of the past, emotionally neutral and previously insignificant.

Being in long-lasting critical situations, people are more often inclined to reevaluate and reconsider their past, in comparison with usual conditions (Frankl, 1992). The necessity of organising life activity when the current moment is uncertain, makes an individual critically reevaluate seemingly usual events, situations and acts kept in their memory. It makes forced migrants search for analogues to the current circumstances, acceptable types of behaviour, inspiring for active, rationally appropriate acts in the structure of the past experience. Active, emotionally coloured reevaluation of the past mostly corresponds to increased orientation towards the positive and negative past in the research participants of Group 1.

Given the established direct statistical correlations between negative mental states and time orientations not only towards the negative, but also positive past, another process is added to the above process (Table 5). The majority of research participants in Group 1 with increased neuroticism and other negative mental states due to depleted resources of self-organisation are not able to utilise the potential of their experience to the full. Positive episodes of the past for such people are not fully added to a sound personal motivational basis, do not strengthen the feeling of self-efficacy and do not increase self-confidence, but rather become a reason for avoiding harsh reality and regrets for the lost well-being. The latter mostly corresponds to actualisation of emotions directed towards them and avoidance of unproductive coping strategies and different psychological defenses (Plokhikh et al., 2023). Therefore, positive memories of the past not only increase, but also contribute to a reduction in the resource of stress resistance of the research participants in Group 1. Self-confidence, masculine decisiveness, energy and cruelty of these research participants decrease and become noticeably lower than in Group 2 (Table 1–5). As a consequence, the issue of identifying an increase in subjective resources for coping with prolonged stress of war can be raised only with regard to a minority of forced migrants within the national boundaries.

## CONCLUSIONS

Under conditions of substantial losses of resources for organisation of life activity and considerable uncertainty and threats concerning the current moment and the future caused by military operations, forced migrants try to orientate themselves mainly towards the desirable future relying on their experience and positive impressions of the past in their time perspective. The balance of orientations in the structure of time perspective of forced migrants is disrupted because of their attempt to avoid negative thoughts, images and feelings concerning the current stressogenic circumstances. The above effect increases due to the development of stable negative mental states in distress and reduced personal resources for coping with stress.

Having a high level of neuroticism and openness to the surrounding and social contacts, forced migrants in the territory of the country under martial law have very restricted time orientations towards provision of comfort and satisfaction at the current moment, negative memories and expectation of fatal changes in a situation. At the same time there are signs of the process of reconsideration and selection of previously neutral impressions of the past. Such reconsideration for a considerable number of the research participants is more orientated not towards search of additional resources for organisation and realisation of a desirable perspective of the future in the structure of the past experience, but towards emotional pain caused by losses intensified by regrets and increased negative states of neuroticism, depressiveness, irritation and aggressiveness.

Having essential social and financial support in the places of temporary residence, forced migrants staying beyond the boundaries of the country under martial law mainly retain stable stereotypes of organisation of life activity even under conditions of substantial losses of material resources. In this case, time orientations of such migrants corresponding to the state of psychological well-being in combination (the positive past, the hedonistic present, the future) appear to be quite distinct and satisfactorily balanced. Forced migrants staying abroad are mostly inclined to use positive past experience as a basis for constructing their future.

#### **Research restrictions**

The given results characterise general tendencies in differences of organisation of time perspective and mental states of forced migrants due to the place and conditions of their temporal residence – in the country under martial law or abroad. This is the main restriction of our research. In order to identify an individual's resources for coping with stress and decide on necessary support measures, it is necessary to take into account a variety of factors in each individual case. The factors of impact on forced migrants in our case are as follows: acute interpersonal conflicts and crises, chronic diseases, consequences of the COVID-19 pandemic, volition, sex, age, professional achievements and experience of coping with stress, family relationships, etc.

## **Cognitive value**

It was found that war stresses determine mental and physical states and uniquely reflect on organisation of time perspective of forced migrants within the national boundaries and those staying abroad. It was established that the forced migrants are inclined to orientate themselves towards the future and the positive past. Internal migrants in the country under martial law have a disrupted balance of time orientations with a high level of neuroticism and openness to the surrounding. It is seen in weaker time orientations towards the hedonistic present, negative memories and expectation of fatal changes in a situation. The identified value of the parameters of time orientations to the state of psychological well-being.

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#### REFERENCES

- Andrushko, Y. (2023). Results of Adaptation of the Methodology for Studying the Acculturation of Migrants by J. Berry on the Ukrainian Sample. *Insight: The Psychological Dimensions of Society*, 10, 90–115. https://doi.org/10.32999/2663–970X/2023–10–5
- Bajec, B. (2019). Relationship Between Time Perspective and Time Management Behaviours. PSIHOLOGIJA, 52(2), 197–215. https://doi.org/10.2298/PSI170831036B
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. https://doi.org/10.1037/0033–295X.84.2.191
- Beck, A. T., Freeman, A., & Davis, D. D. (2004). Cognitive therapy of personality disorders (2nd ed.). Guilford Press. https://psycnet.apa.org/record/2004–00033–000
- Blynova, O., Derevianko, S., Ivanova, O., Popovych, I., & Estay Sepulveda, J. G. (2022). Professional relevance of potential labor emigrants. *Revista Notas Históricas y Geográficas, 29*, 88–106.

https://www.revistanotashistoricasygeograficas.cl/index.php/nhyg/article/view/435

- Blynova, O., Chervinska, I., Kazibekova, V., Bokshan, H., Yakovleva, S., Zaverukha, O., & Popovych I. (2020). Social and Psychological Manifestations of Professional Identity Crisis of Labor Migrants. *Revista Inclusiones*, 7(3), 93–105. https://www.revistainclusiones.org/index.php/inclu/article/view/1318
- Blynova, O. Ye., Popovych, I. S., Bokshan, H. I., Tsilmak, O. M., & Zavatska, N. Ye. (2019). Social and Psychological Factors of Migration Readiness of Ukrainian Students. *Revista ESPACIOS*, 40(36). https:// www.revistaespacios.com/a19v40n36/19403604.html

- Cheban, Y., Chebykin, O., Plokhikh, V., & Massanov, A. (2020). Mental resources for the self-mobilization of rowing athletes. *Journal of Physical Education and Sport*, 20(3), 1580–1589. https://doi. org/10.7752/jpes.2020.03216
- Fahrenberg, J., Hampel, R., & Selg, H. (2010). Freiburg Personality Inventory FPI-R. Primary data from the standardization sample 1982 (Version 1.0.0). Center for Research Data in Psychology: PsychData of the Leibniz Institute for Psychology ZPID. https://doi.org/10.5160/psychdata.fgjn82fr19
- Frankl, V. E. (1992). Man's search for meaning: An introduction to logotherapy (4th ed.) (I. Lasch, Trans.). Beacon Press. (Original work published in 1946). https://psycnet.apa.org/record/1992–98457–000
- Halian, A., Halian, I., Popovych, I., Zavatskyi, Y., Semenov, O., & Semenova, N. (2021). Stress Resistance in the Situation of Uncertainty as a Factor of Development of Adaptive Ability of Medical Personnel. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 12(1), 251–264. https://doi. org/10.18662/brain/12.1/181
- Hromova, H. (2022). Intolerance of Uncertainty-Related Aspects of Planning for the Future During the Pandemic. *Journal of Education Culture and Society*, 13(1), 257–269. https://jecs.pl/index.php/jecs/article/view/1430
- Karpenko, Z. S., & Klympush, A. R. (2023). Future psychologists' dispositional predictors of psychological well-being under martial law. *Insight: The Psychological Dimensions of Society*, 9, 13–32. https://doi. org/10.32999/KSU2663–970X/2023–9-2
- Khraban, T. E., & Silko, O. V. (2022). Combat and military-professional stress: the influence of emotions and emotional states on the choice of coping strategies. *Insight: The Psychological Dimensions of Society*, 8, 71–87. https://doi.org/10.32999/2663–970X/2022–8-6
- Kobylarek, A. (2019). Education in the post-scientific culture. *Journal of Education Culture and Society*, 10(1), 5–13. https://jecs.pl/index.php/jecs/article/view/569
- Kurova, A., Popovych, I., Hrys, A., Koval, I., Pavliuk, M., Polishchuk, S., & Kolly-Shamne, A. (2023). Dispositional optimistic and pessimistic mental states of young athletes: gender differentiation. *Journal* of Physical Education and Sport, 23(4), 857–867. https://doi.org/10.7752/jpes.2023.04109
- Kuzikova, S. B., Zlyvkov, V. L., & Lukomska, S. O. (2023). Traumatic experience of residents of the de-occupied territories of Ukraine. *Insight: The Psychological Dimensions of Society*, 9, 228–243. https://doi. org/10.32999/KSU2663–970X/2023–9-13
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *Europe-an Journal Personality*, 1(3), 141–169. https://doi.org/10.1002/per.2410010304
- Lavoie, R., Main, K., & Stuart-Edwards A. (2022). Flow theory: Advancing the twodimensional conceptualization. *Motivation and Emotion*, 46, 38–58. https://doi.org/10.1007/s11031–021–09911–4
- Nosov, P. S., Popovych, I. S., Cherniavskyi, V. V., Zinchenko, S. M., Prokopchuk Y. A., & Makarchuk D. V. (2020). Automated identification of an operator anticipation on marine transport. *Radio Electronics, Computer Science, Control*, 3(54), 158–172. https://doi.org/10.15588/1607–3274–2020–3-15
- Pfeifer L. S., Heyers K., Ocklenburg S., & Wolf O.T. (2021). Stress research during the COVID-19 pandemic and beyond. *Neuroscience and Biobehavioral Reviews*, 131, 581–596. https://doi.org/10.1016/j.neubiorev.2021.09.045
- Pisanski, K., Kobylarek, A., Jakubowska, L., Nowak, J., Walter, A., Błaszczyński, K., Kasprzyk, M., Łysenko, K., Sukiennik, I., Piątek, K., Frackowiak, T., & Sorokowski, P. (2018). Multimodal stress detection: Testing for covariation in vocal, hormonal and physiological responses to Trier Social Stress Test. *Hormones and Behavior*, *106*, 52–61. https://doi.org/10.1016/j.yhbeh.2018.08.014
- Plokhikh, V., Popovych, I., Koval, I., Stepanenko, L., Nosov, P., Zinchenko, S., Boiaryn, L. & Zavatskyi, V. (2022). Anticipatory Resource of Temporary Regulation of Sensorimotor Action. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 13(2), 01–21 https://doi.org/10.18662/brain/13.2/328
- Plokhikh, V., Popovych, I., Zavatska, N., Losiyevska, O., Zinchenko, S., Nosov, P., & Aleksieieva, M. (2021). Time Synthesis in Organization of Sensorimotor Action. *BRAIN. Broad Research in Artificial Intelligence* and Neuroscience, 12(4), 164–188. https://doi.org/10.18662/brain/12.4/243
- Plokhikh, V. V. (2022). Limitation of psychological defense on the formation of students' time perspective. Insight: The Psychological Dimensions of Society, 8, 39–55. https://doi.org/10.32999/2663– 970X/2022–8-4
- Plokhikh, V. V. (2023). Relationship between coping behavior and students' perceptions of the passage of time. *Insight: The Psychological Dimensions of Society*, 9, 72–93. https://doi.org/10.32999/KSU2663– 970X/2023–9-5

- Plokhikh, V., Yanovskaya, S., & Bilous, R. (2023). Psychological Defenses of Students in the Process of Experience of Time. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 14(1), 138–156. https://doi.org/10.18662/brain/14.1/411
- Popovych, I., Blynova, O., Zhuravlova, A., Toba, M., Tkach, T., & Zavatska, N. (2020a). Optimization of development and psycho-correction of social expectations of students of foreign philology. *Revista Inclusiones*, 7(S1), 82–94. http://www.revistainclusiones.org/index.php/inclu/article/view/1657
- Popovych, I., Chervinska, I., Kazibekova, V., Vasylyk, V., Verbeschuk, S., & Gniezdilova, V. (2022a). Young athletes' time perspective as a factor in the development of sports motivation. *Journal of Physical Education and Sport*, 22(10), 2427–2435. https://doi.org/10.7752/jpes.2022.10310
- Popovych, I., Halian, I., Lialiuk, G., Chopyk, R., Karpenko, Ye., & Melnyk, Yu. (2022b). Research of young female handball players' self-actualizing mental states. *Journal of Physical Education and Sport*, 22(7), 1599–1607. https://doi.org/10.7752/jpes.2022.07201
- Popovych, I., Hulias, I., Serbin, Iy., Piletska, L., Mashchak, S., & Zahrai, L. (2023a). Psychological content parameters of attention in the structure of time perspective of young female athletes: comparative analysis. *Journal of Physical Education and Sport*, 23(1), 152–161. https://doi.org/10.7752/jpes.2023.01019
- Popovych, I., Kononenko, O., Kononenko, A., Stynska, V., Kravets, N., Piletska, L., & Blynova, O. (2020b). Research of the Relationship between Existential Anxiety and the Sense of Personality's Existence. *Revista Inclusiones*, 7(SI), 41–59. https://www.revistainclusiones.org/index.php/inclu/article/view/300
- Popovych, I., Hudimova, A., Bokhonkova, Yu., Savchuk, O., Hoian, I., & Shevchenko, N. (2023b). Dispositional Mental States of Internally Displaced University Teachers Under Martial Law: Gender Differences. *Journal of Education Culture and Society*, 14(2), 171–187. https://doi.org/10.15503/jecs2023.2.171.181
- Przepiorka, A., Siu, N. Y., Szcześniak, M., Timoszyk-Tomczak, C., Le, J. J., & Mucoz, M. P. (2020). The Relation Between Personality, Time Perspective and Positive Orientation in Chile, Hong Kong, and Poland. *Journal of Happiness Studies*, 21, 1081–1101. https://doi.org/10.1007/s10902–019–00113-x
- Schneiderman, N., Ironson, G., & Siegel, S. D. (2005). Stress And Health: Psychological, Behavioral, and Biological Determinants. *Annual Review of Clinical Psychology*, 1(1), 607–628. https://doi.org/10.1146/ annurev.clinpsy.1.102803.144141
- Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive Psychology: An Introduction. In M. Csikszentmihalyi (Ed.), *Flow and the Foundations of Positive Psychology* (pp. 279–298). Dordrecht: Springer. https://doi.org/10.1007/978–94–017–9088–8 18
- Seligman M. E., Parks A. C., & Steen T. (2004). A balanced psychology and a full life. *Philosophical Transactions of the Royal Society B*, 359(1449), 1379–1381. https://doi.org/10.1098/rstb.2004.1513
- Selye, H. A. (1975). Confusion and Controversy in the Stress Field. Journal of Human Stress, 1, 37–44. http://dx.doi.org/10.1080/0097840X.1975.9940406
- Shepherd, J. (2022). Flow and the dynamics of conscious thought. *Phenomenology and the Cognitive Sciences*, 21, 969–988. https://doi.org/10.1007/s11097–021–09762-x
- Shostrom, E. L. (1964). An Inventory for the Measurement of Self-Actualization. Educational and Psychological Measurement, 24(2), 207–218. https://doi.org/10.1177/001316446402400203
- Uribe Guajardo, M. G., Slewa-Younan, S., Smith, M., Eagar, S., & Stone, G. (2016). Psychological distress is influenced by length of stay in resettled Iraqi refugees in Australia. *International Journal of Mental Health Systems*, 10. https://doi.org/10.1186/s13033–016–0036-z
- Vargas-Hernández, J. G. & Kariyev, A. D. (2023). Didactic Strategies for Meaningful Learning. In R. González-Lezcano (Ed.), Advancing STEM Education and Innovation in a Time of Distance Learning (pp. 47–72). IGI Global. https://doi.org/10.4018/978–1-6684–5053–6.ch003
- Vargas-Hernández, J. G., Vargas-González, O. C., Castañeda-Burciaga, S., & Kariyev, A. D. (2023). Meaningful Learning Didactic Strategies in Higher Education. In N. Alias, S. Syed-Aris, & H. Hashim (Eds.), Cases on Responsive and Responsible Learning in Higher Education (pp. 54–72). IGI Global. https://doi.org/10.4018/978–1-6684–6076–4.ch004
- Zavatska, N., Petrenko, M., Zavatskyi, V., & Zhyharenko, I. (2023). Operationalization of Temporality of Future Professionals in the Field of Socionomics in the Dimensions of Psychological Well-being. *Insight: The Psychological Dimensions of Society*, 10, 156–173. https://doi.org/10.32999/2663–970X/2023–10–8
- Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: a valid, reliable individual-differences metric. *Journal of Personality Social Psychology*, 77(6), 1271–1288. https://doi.org/10.1037/0022– 3514.77.6.1271