



**Yana Sychikova**

doctor of technical sciences, professor  
Vice-rector for scientific work of

# Berdiansk State Pedagogical University

The city of Berdiansk was occupied  
on the third day of the war. Due to  
the occupation, the university was  
relocated to Zaporizhzhia.  
We lost all the buildings and the  
material-technical base.  
Now we are a  
**University without walls**

Our university  
community is scattered  
around the world

But the university  
is not just about  
buildings;  
University is  
about people

**nature**

Explore content ▾ About the journal ▾ Publish with us ▾ Subscribe

[nature](#) > [correspondence](#) > article

CORRESPONDENCE | 14 February 2023

## Universities without walls: global trend v. Ukraine's reality

[Yana Sychikova](#) & [Natalia Tsybuliak](#)

Many of Ukraine's universities exist today only in virtual format – as 'universities without walls'. This metaphor represents the grim reality of institutions destroyed since Russia invaded Ukraine in February 2022. However, these virtual universities are devoid of the freedom and support of the popular global University Without Walls concept, which also offers degree programmes outside conventional classrooms (see [go.nature.com/318xyvm](https://go.nature.com/318xyvm)).

**Abroad**

Country	Count
Canada	(1)
United States	(2)
United Kingdom	(2)
Ireland	(2)
Netherlands	(2)
Belgium	(1)
Germany	(14)
Spain	(1)
Norway	(1)
Denmark	(1)
Czechia	(2)
Lithuania	(1)
Poland	(2)
Slovakia	(1)
Bulgaria	(2)
Georgia	(2)
Austria	(1)
Italy	(1)
Cyprus	(1)

**In Ukraine**

Location	Count
Kyiv	(40)
Kharkiv	(1)
Donetsk	(2)
Chernihiv	(5)
Cherkassy	(3)
Poltava	(3)
Sumy	(1)
Luhansk	(1)
Kherson	(1)
Mykolaiv	(1)
Odesa	(1)
Zaporizhzhia	(3)
Khmelnytskyi	(1)
Vinnitsa	(1)
Chernobyl	(1)
Ukraine	(2)
Belarus	(1)
Poland	(1)
Slovakia	(1)
Czechia	(1)
Germany	(1)
France	(1)
Italy	(1)
Spain	(1)
United States	(1)
Canada	(1)
United Kingdom	(1)
Ireland	(1)
Netherlands	(1)
Belgium	(1)
Germany	(1)
Spain	(1)
Norway	(1)
Denmark	(1)
Czechia	(1)
Lithuania	(1)
Poland	(1)
Slovakia	(1)
Bulgaria	(1)
Georgia	(1)
Austria	(1)
Italy	(1)
Cyprus	(1)

Advanced Photonic PRocesses for novel sOLar energy hARvesting teCHnologies

Gender dimension in research and innovation

# **Burnout of Ukrainian Academic Staff during the war: gender aspect**

Yana Suchikova, Natalia Tsybuliak, Hanna Lopatina, Anastasia Popova, Serhii Kovachov

Berdiansk State Pedagogical University, Ukraine



Horizon 2020  
European Union Funding  
for Research & Innovation



This project receives funding  
in the European  
Commission's Horizon 2020  
Research Programme under  
Grant Agreement Number  
101120397



# Introduction



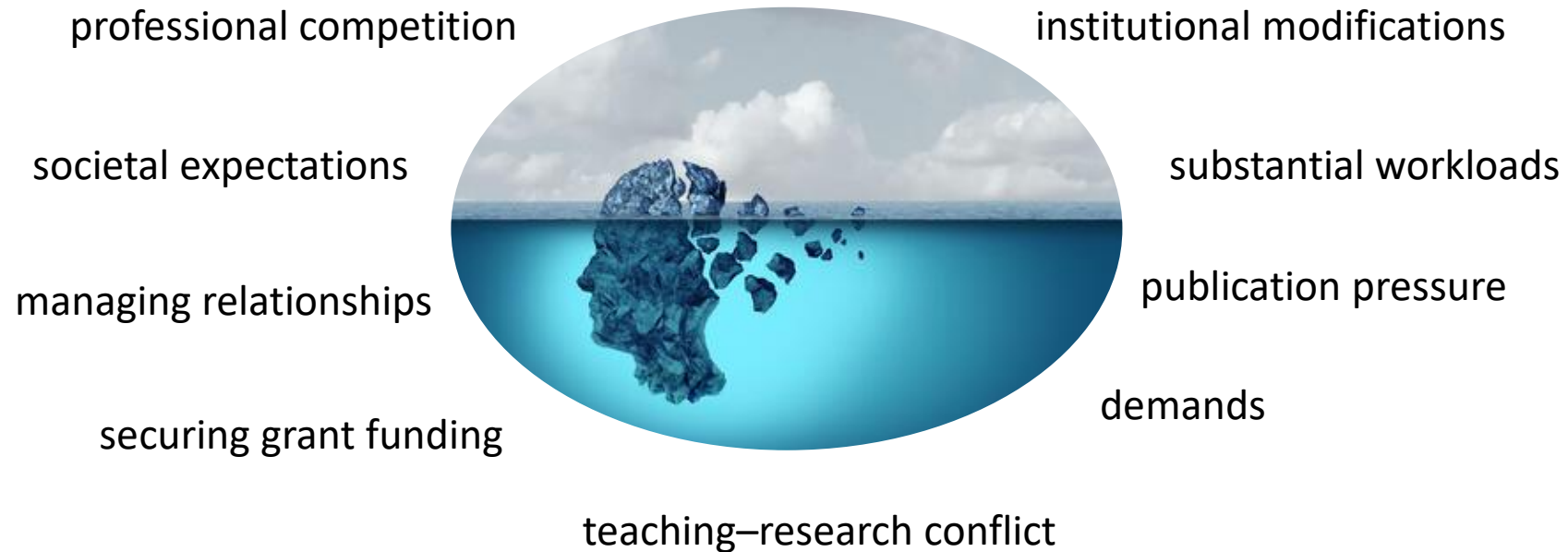
- **Burnout** is recognized as a typical professional hazard in various people-centric professions<sup>1,2</sup>.
- Professionals in the education sector are particularly vulnerable to an **increased risk of burnout**, as teaching inherently involves demanding working conditions<sup>3</sup>.
- According to Karasek's theory, teaching is classified as a stressful profession<sup>4,5</sup>.
- A significant proportion of academic staff rate their work as the primary source of stress<sup>6,7</sup>.

---

1. De Hert, S. Burnout in healthcare workers: Prevalence, impact and preventative strategies. *Local Reg. Anesth.* 13, 171–183. <https://doi.org/10.2147/LRA.S240564> (2020).  
2. Sabagh, Z., Hall, N. C. & Saroyan, A. Antecedents, correlates and consequences of faculty burnout. *Educ. Res.* 60, 131–156. <https://doi.org/10.1080/00131881.2018.1461573> (2018).  
3. Hakanen, J. J., Bakker, A. B. & Schaufeli, W. B. Burnout and work engagement among teachers. *J. School Psychol.* 43, 495–513. <https://doi.org/10.1016/j.jsp.2005.11.001> (2006).  
4. Lee, M. et al. Occupational stress in university academics in Australia and New Zealand. *J. Higher Educ. Policy Manag.* 44, 57–71. <https://doi.org/10.1080/1360080X.2021.1934246> (2022).  
5. Karasek, R. A. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Adm. Sci. Q.* 24, 285–308 (1979).  
6. Abouserie, R. Stress, coping strategies and job satisfaction in university academic staff. *Educ. Psychol.* 16, 49–56. <https://doi.org/10.1080/0144341960160104> (1996).  
7. Padilla, M. A. & Thompson, J. N. Burning out at doctoral research universities. *Stress Health* 32, 551–558 (2016).

# Introduction

The educational landscape is characterized by:



**Collectively, these factors serve as catalysts for chronic stress among academic staff.**

# Motivation

Crisis events significantly affect the mental health of academic staff and increase burnout. During the COVID-19 a new kind of fatigue appeared, called "[online fatigue](#)".



Currently, we are witnessing the most extensive military conflict in Central Europe since 1945, instigated by the Russian Federation against Ukraine.

The influence of **war** is an additional factor in causing burnout



There is a lack of research examining the impact of the Russo-Ukrainian conflict on the mental health of academic staff.



# Motivation

*Ukrainian academic staff are brave in trying to hold their educational and scientific front.*

## **'We are unbroken.' A Ukrainian academic's perseverance in a year of war**

23 FEB 2023 • 2:00 PM ET • BY [YANA SUCHIKOVA](#)



**Today, the professional activity of a Ukrainian academic staff depends on:**

- the map of active hostilities,
- missile attacks,
- air raid alerts,
- the availability of electricity,
- the stability of the Internet.

**It is crucial to investigate the condition and dynamics of burnout experienced in a state of unremitting chronic stress caused by both the conventional challenges faced by academic staff and additional factors induced by warfare**

# Theoretical framework

## What is Burnout?

Burnout is a state of emotional, physical, and mental exhaustion caused by excessive and prolonged stress. It occurs when you feel overwhelmed, emotionally drained, and unable to meet constant demands.

## Predictors of Burnout According to the Maslach Burnout Inventory-Human Services Study (MBI-HSS):



### 1. Emotional Exhaustion

Feeling drained, **lacking energy**, unable to provide any more of oneself emotionally



### 2. Depersonalization

Developing a **cynical** and detached **attitude** towards one's work and the people



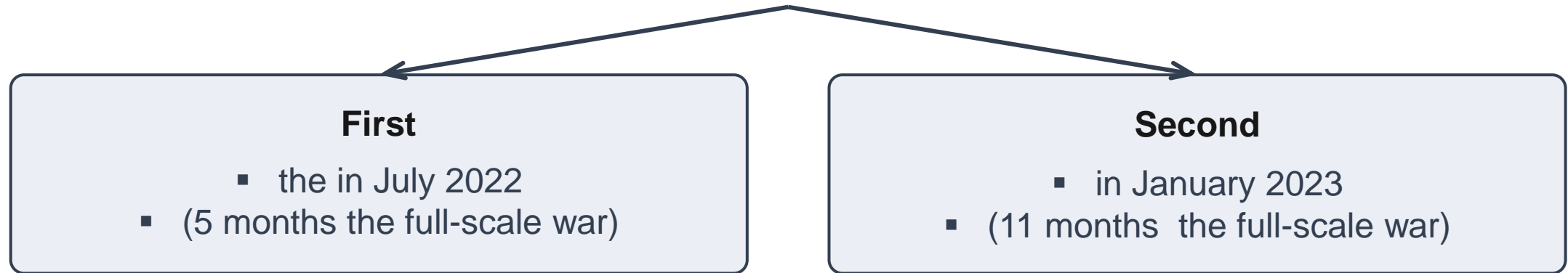
### 3. Reduced Personal Accomplishment

Feeling a sense of **ineffectiveness** and a lack of accomplishment and productivity at work

# Methods

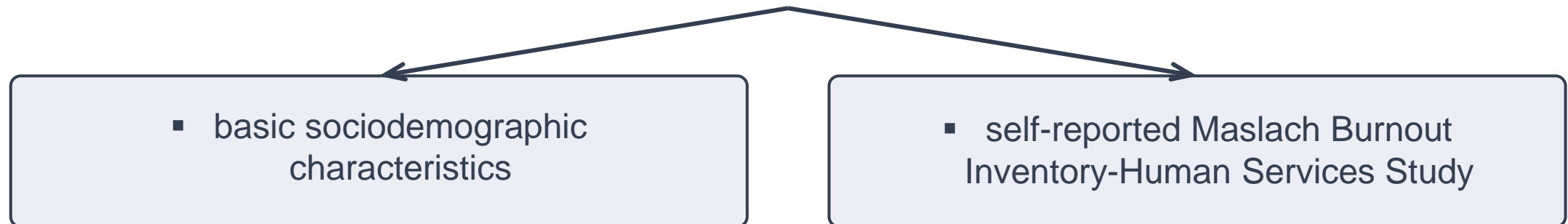
This study is a cross-sectional analytical research.

**The research was conducted in two waves**



The online survey was a self-administered questionnaire that took 10 to 12 minutes to complete.

**It consisted of two sections**





# Participants

**836** academic staff members participated in the **first wave** of evaluation, whereas **228** participated in the **second wave**.

Variable	Subcategory	1st wave		2nd wave	
		%	N	%	N
Age	Under 35	15	127	15	35
	35–50 years	45	379	37	84
	51–60 years	33	275	42	95
	61 older	7	55	6	14
Gender	Male	20	171	14	31
	Female	80	665	86	197
Scientific degree	Doctor of science	18	152	18	42
	PhD degree	64	536	67	152
	Magister degree	18	148	15	34
Academic position	Professor	18	147	18	41
	Associate professor	55	464	61	139
	Senior lecturer	18	148	15	34
	Assistant	9	77	6	14
Change of permanent residence	Internal military migrants	24	199	22	50
	External military migrants	13	111	11	24
	Remained in the places of permanent residence	63	526	68	154
Currently University location	Remained at a permanent location	79	659	77	176
	Temporarily relocated to the Ukraine-controlled territory	21	177	23	52

# ***Burnout*** ***dynamic***

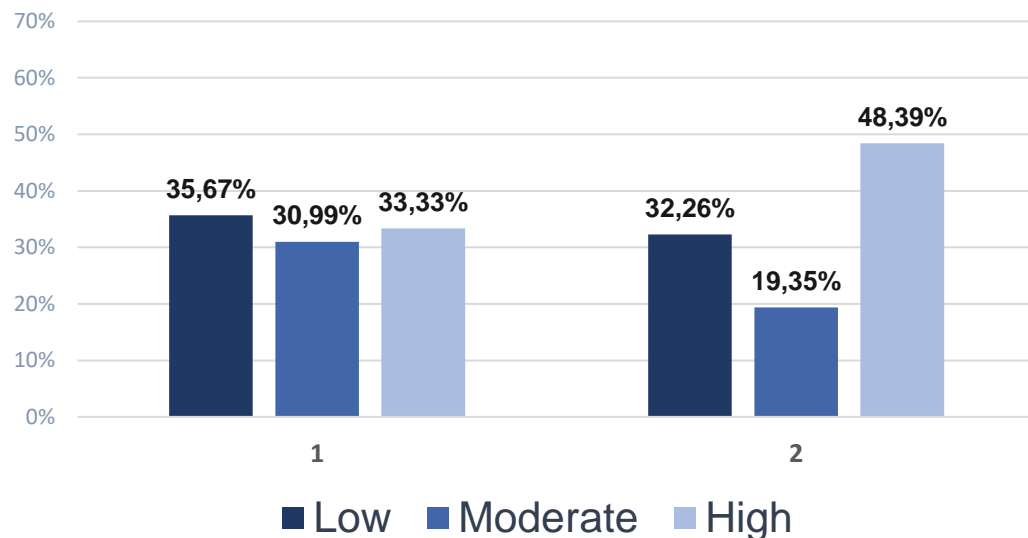


# Emotional Exhaustion

The proportion of individuals experiencing high levels of emotional exhaustion increased **for both men and women.**

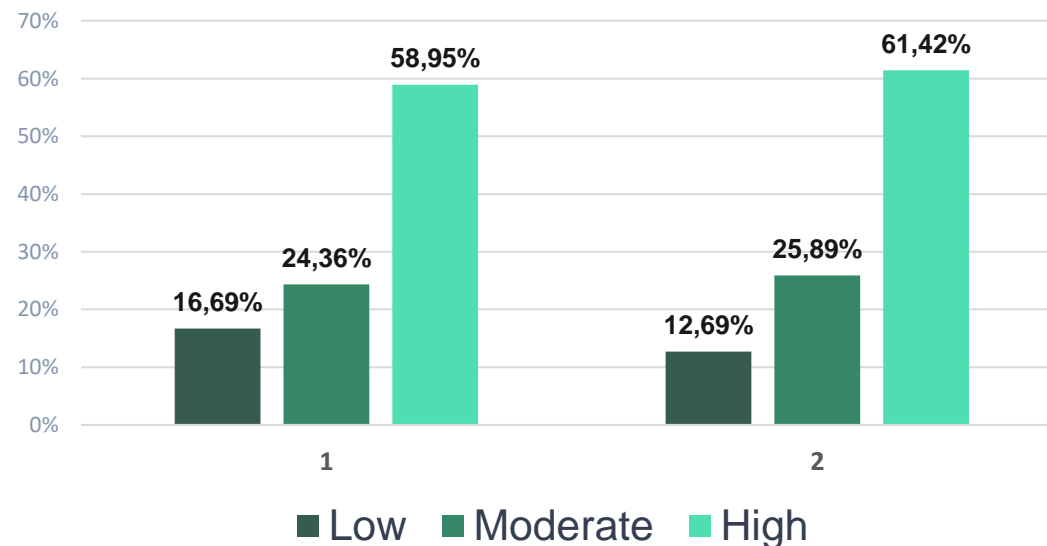
- Specifically, for **men**, the percentage of academic staff experiencing high levels of emotional exhaustion rose from **33.33%** in July to **48.39%** in December.

## Men



- Similarly, for **women**, this percentage increased slightly from **58.95%** to **61.42%**

## Women





# Emotional Exhaustion

Increased Emotional Exhaustion: Both surveys show a **significant rise in emotional exhaustion among all staff**, highlighting the intense emotional strain during wartime.

Burnout predictor	Gender	Wave	Age		Scientific degree		Academic position		Change of permanent residence		Currently University location	
			Chi-Square (X <sup>2</sup> )	Asymp. Sig.	Chi-Square (X <sup>2</sup> )	Asymp. Sig.	Chi-Square (X <sup>2</sup> )	Asymp. Sig.	Chi-Square (X <sup>2</sup> )	Asymp. Sig.	Chi-Square (X <sup>2</sup> )	Asymp. Sig.
EE	Men	1	8.056	0.018	0.343	0.843	1.77	0.413	1.14	0.565	1.406	0.495
		2	1.114	0.573	2.612	0.271	4.779	0.092	3.244	0.197	1.067	0.587
	Women	1	1.446	0.485	0.177	0.915	0.43	0.807	13.33	0.001	0.519	0.771
		2	0.518	0.772	5.639	0.06	5.944	0.051	1.522	0.467	0.633	0.729

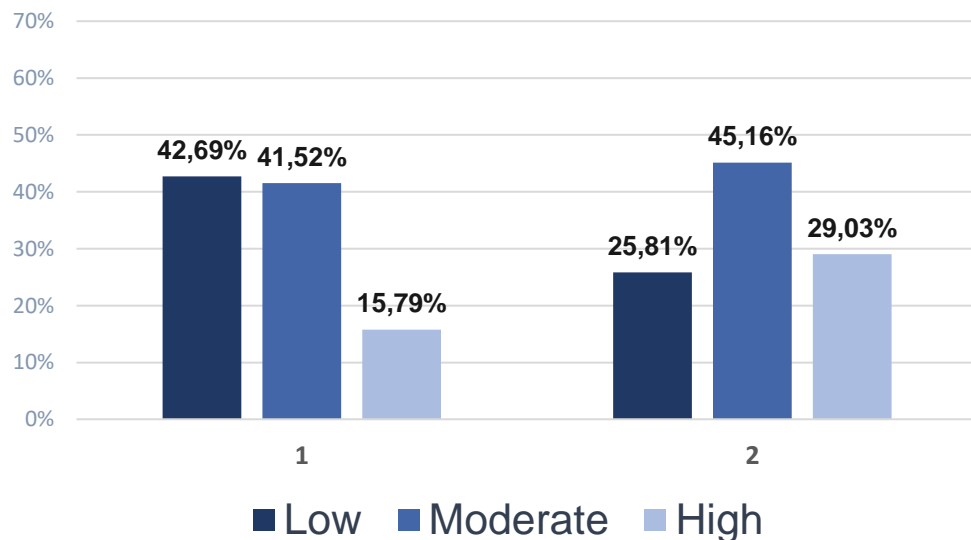
- **Gender Differences:**
  - **Female Staff:** Higher levels of emotional exhaustion were noted in both surveys.
  - **Male Staff:** There is a notable increase in emotional exhaustion over one year of conflict, suggesting a delayed reaction compared to female staff.
- **Age Factor in Men:** The impact of age on emotional exhaustion decreases over time during continuous wartime stress.

# Depersonalization

There was also a significant increase in the percentage of individuals experiencing high levels of depersonalization **for both genders**.

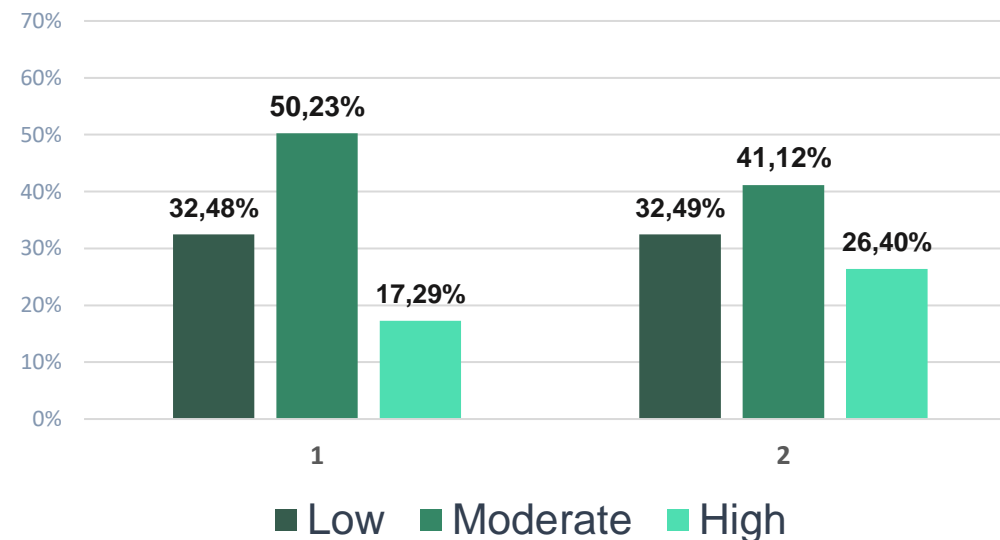
Among **men**, the percentage of academic staff exhibiting high levels of depersonalization increased from **15.79%** in July to **29.03%** in December.

## Men



**Women** also showed an increase from **17.29%** to **26.40%**.

## Women



# Depersonalization

The results of the study demonstrate that prolonged stress related to the ongoing war and increased workload leads to significant depersonalization dynamics among academic staff of **both genders**

Burnout predictor	Gender	Wave	Age		Scientific degree		Academic position		Change of permanent residence		Currently University location	
			Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.
DP	Men	1	8.473	0.014	0.001	0.999	0.342	0.843	0.953	0.621	1.354	0.508
		2	1.539	0.463	4.565	0.102	5.833	0.054	1.651	0.438	1.601	0.449
	Women	1	2.689	0.261	2.992	0.224	2.162	0.339	12.856	0.002	2.088	0.352
		2	1.394	0.498	4.796	0.091	3.957	0.138	2.512	0.285	3.813	0.149

## Male Academic Staff:

- **First Survey:** Age is correlated with higher depersonalization.
- **Second Survey:** Age becomes an insignificant factor; instead, academic position is significant in influencing depersonalization.

## Female Academic Staff:

- **First Survey:** University relocation to territories controlled by Ukraine influences feelings of depersonalization.
- **Second Survey:** No correlation between depersonalization and factors such as age, academic position, scientific degree, or migration processes. Women consistently report feelings of alienation, cynicism, and detachment from their professional activities throughout the war.

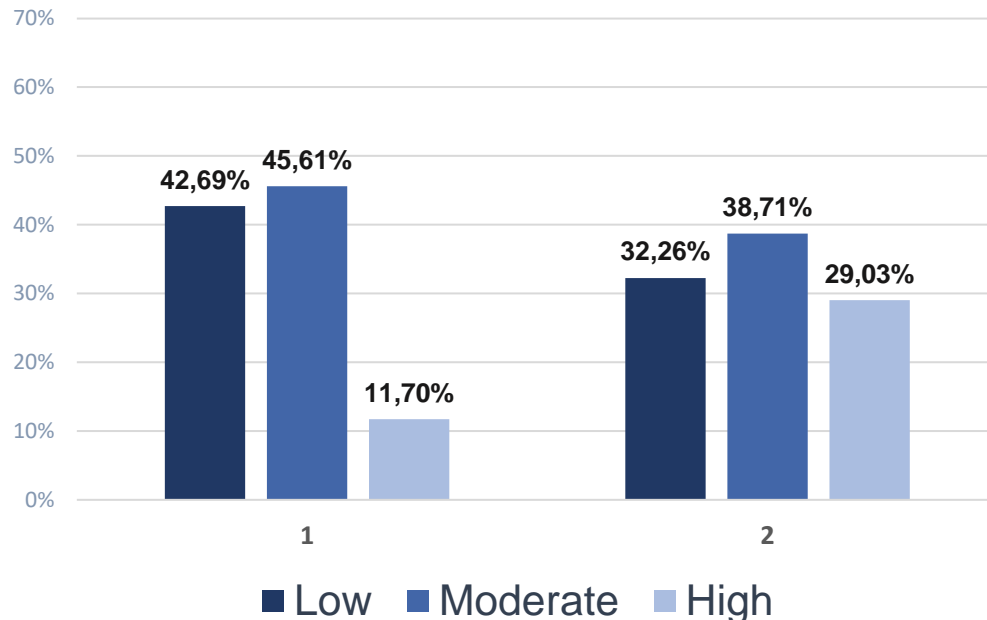


# Reduced Personal Accomplishment

Concerning **personal accomplishments**, there was a decrease in the percentage of individuals with high levels **for both sexes**.

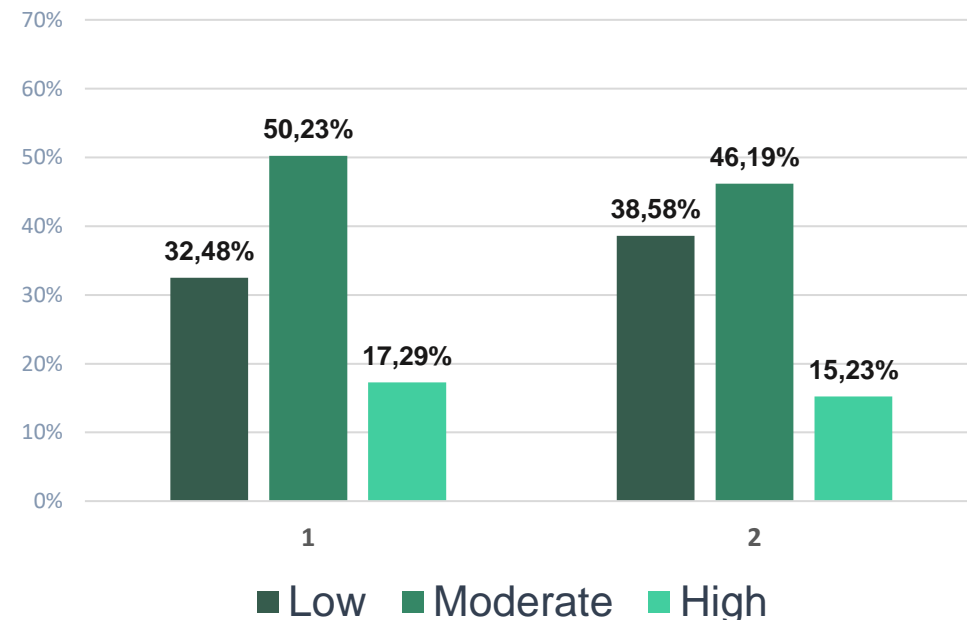
- For **men**, the percentage of those with low levels of personal achievement decreased from **42.69%** to **32.26%**.

## Men



- However, among **women**, there was an increase in indicators of low levels of this predictor, from **32.48%** to **38.58%**

## Women



# Reduced Personal Accomplishment

The research results indicate that **female** academic staff experience a reduction in accomplishment during the ongoing war in Ukraine.

Burnout predictor	Gender	Wave	Age		Scientific degree		Academic position		Change of permanent residence		Currently University location	
			Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.	Chi-Square ( $\chi^2$ )	Asymp. Sig.
PA	Men	1	1.959	0.375	0.273	0.872	2.645	0.266	1.008	0.604	0.759	0.684
		2	2.791	0.248	4.445	0.108	2.268	0.322	0.538	0.764	0.55	0.76
	Women	1	2.682	0.262	2.271	0.321	7.473	0.024	1.818	0.403	0.475	0.789
		2	1.81	0.405	4.868	0.088	5.278	0.071	9.811	0.007	7.762	0.021

## Initial Findings:

- **First Survey:** Academic position significantly influences perceptions of personal accomplishment among **female** educators.

## Changes Over Time:

- **Six Months Into War:** Academic position no longer a significant factor.
- **New Significant Factors:** University relocation and migration processes now significantly shape perceptions of effectiveness and accomplishment among **female** staff.

# Dynamics of Burnout Factors Among Ukrainian Academic Staff During War

## Initial Impact on Male Educators:

- **Age:** Initially a significant factor for emotional exhaustion and depersonalization.
- **Academic Degree:** Found to be an insignificant factor for burnout throughout the war.

## Changing Significance Over Time:

- As the war progresses, the impact of age on burnout dynamics decreases and becomes non-essential.

## Impact of Academic Position:

- **Female Staff:** Initially significant for accomplishment, later influences emotional exhaustion.
- **Male Staff:** Affects depersonalization dynamics, varies with the duration of the war.

## War-Related Influences:

- **University Relocation significantly impacts the** emotional exhaustion and depersonalization of female staff in the early months; later, it influences their perception of personal accomplishment.
- **Migration Processes:** Emerges as an essential factor as the war continues.

## Gender Sensitivity to War-Related Factors:

- Female staff show higher sensitivity to the influences of war-related factors, affecting various aspects of burnout.

**The alarming levels of burnout detected among Ukrainian academic staff represent only the tip of the iceberg of the mental health problems caused by the war.**





# Conclusion

These findings emphasize the need for further research on the impact of war on academic staff burnout and the development and implementation of appropriate support strategies and interventions. Burnout can have a negative impact on academic staff productivity and mental health, which ultimately affects the quality of education provided to students. Therefore, it is crucial to minimize this effect.

The alarming trend of burnout levels detected among Ukrainian academic staff highlights the need for prompt action at both the national and institutional levels to improve the mental health of academic staff. This is crucial for preserving human capital in the field of higher education during times of war and for postwar recovery. Further research can also help to identify the factors that increase or decrease the risk of burnout under these conditions, enabling the development of more targeted and effective interventions.



# Read more

- Tsybuliak, N., Suchikova, Y., Shevchenko, L., Popova, A., Kovachev, S., & Hurenko, O. (2023). Burnout dynamic among Ukrainian academic staff during the war. *Scientific Reports*, 13(1). <https://doi.org/10.1038/s41598-023-45229-6>
- Suchikova, Y., Tsybuliak, N., Lopatina, H., Shevchenko, L., & I. Popov, A. (2023). Science in times of crisis: How does the war affect the efficiency of Ukrainian scientists? *Problems and Perspectives in Management*, 21(1), 408–424. [https://doi.org/10.21511/ppm.21\(1\).2023.35](https://doi.org/10.21511/ppm.21(1).2023.35)
- Suchikova, Y. (2023). A year of war. *Science*, 379(6634), 850. <https://doi.org/10.1126/science.adh2108>
- Lopatina, H., Tsybuliak, N., Popova, A., Bohdanov, I., & Suchikova, Y. (2023). University without Walls: Experience of Berdyansk State Pedagogical University during the war. *Problems and Perspectives in Management*, 21(2), 4–14. [https://doi.org/10.21511/ppm.21\(2-si\).2023.02](https://doi.org/10.21511/ppm.21(2-si).2023.02)
- Suchikova, Y., & Tsybuliak, N. (2023). Universities without walls: global trend v. Ukraine's reality. *Nature*, 614(7948), 413. <https://doi.org/10.1038/d41586-023-00380-y>
- Suchikova, Y., Tsybuliak, N., Lopatina, H., Popova, A., Kovachov, S., Hurenko, O., & Bogdanov, I. (2023). Is science possible under occupation? Reflection and coping strategy. *Corporate Governance and Organizational Behavior Review*, 7(2, special issue), 314–324. <https://doi.org/10.22495/cgobrv7i2sip10>
- Gurenko, O., & Suchikova, Y. (2023). The Odyssey of Ukrainian Universities: From quality assurance to a culture of quality education. *Management in Education*. <https://doi.org/10.1177/08920206231218351>
- Tsybuliak, N., Suchikova, Y., Gurenko, O., Lopatina, H., Kovachov, S., & Bohdanov, I. (2023). Ukrainian universities at the time of war: From occupation to temporary relocation. *Torture Journal*, 33(3), 39–64. <https://doi.org/10.7146/torture.v33i3.136256>

# ACKNOWLEDGMENT

The work was carried out with the support of the Ministry of Education and Science of Ukraine within the framework of the state budget study 0123U105351 «[Ukrainian universities in new realities: the impact of war and mechanisms for preserving the scientific and staffing potential for training specialists in high-tech sectors](#)»

Also, this research is implemented within the framework of project 101129085 "[Open Science for Ukrainian Higher Education System](#)" (Open4UA) under the Erasmus+ KA2 program (Key Action: Cooperation for innovation and the exchange of good practices).

Natalia Tsybuliak's research was partly supported by COST Actions CA19117 - Researcher Mental Health (ReMO). Yana Suchikova's research was partly supported by COST Actions CA20129 "Multiscale Irradiation and Chemistry Driven Processes and Related Technologies" (MultiChem) and CA20126 - Network for research, innovation and product development on porous semiconductors and oxides (NETPORE).

[We also thank the Armed Forces of Ukraine for ensuring the safety of this work. The Ukrainian Army's resilience and courage made this work possible.](#)



# THANK YOU FOR YOUR ATTENTION

**Yana Sychikova,**

Doctor of Technical Sciences, Professor,  
Vice-Rector for Research,  
Berdyansk State Pedagogical University, Ukraine

+38 (066) 338-78-64

E-mail: [yanasuchikova@gmail.com](mailto:yanasuchikova@gmail.com)

ORCID: <https://orcid.org/0000-0003-4537-966X>

