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Life Satisfaction and Psychological Resilience among University Students during Wartime

Authors' Contribution:

A – Study design;
B – Data collection;
C – Statistical analysis;
D – Data interpretation;
E – Manuscript preparation;
F – Literature search;
G – Funds collection

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Abstract

The war in Ukraine is having a significant impact on the mental health of all its residents. This is particularly noticeable among young university students, who are forced to seek refuge both within and outside the country during their studies. The aim of the study: to identify the characteristics of life satisfaction and psychological resilience among university students in different learning environments during wartime.

Material and Methods:

The study was conducted at Uzhhorod National University in Ukraine in May 2025. It used the Google Forms platform to administer two psychological tests: the Satisfaction with Life Scale (SWLS) and the Connor-Davidson Resilience Scale 10 (CD-RISC 10). Respondents aged 18–35 were divided into two groups. Group 1 consisted of 116 students, 21.6% of whom were male and 78.4% of whom were female. None of them has changed their place of residence (Ukraine). Group 2 consisted of 108 students, 19.4% of whom were male and 80.6% of whom were female. They were all forced to relocate to other regions, including Ukraine and the European Union.

Results:

Both groups of students showed high internal consistency in their SWLS and CD-RISC 10 scores (Cronbach's alpha of 0.856 to 0.929). Students in Group 1 report levels of extreme and general dissatisfaction with life that are almost 1.4 times higher than those in Group 2. However, this indicator is significantly higher among men than women. This suggests that their psychological well-being is poor. On average, students in Group 1 are 25.5% more psychologically resilient than those in Group 2, who are 23.6% resilient. Furthermore, the proportion of students in Group 2 who have low psychological resilience is almost double that in Group 1. In terms of gender characteristics, women in Group 1 demonstrate higher levels of psychological resilience (29.7%), whereas men in Group 2 demonstrate lower levels (14.3%). These are the highest levels observed across all gender groups.

Conclusions:

A positive strong correlation ($r=0.811$) has been found between psychological resilience and life satisfaction among university students during wartime, confirming high convergent validity. However, there was a significant decrease in psychological resilience among students in Group 2, who had relatively low levels of life satisfaction. Therefore, it is necessary to develop programmes that actively promote psychological intervention and social support to improve the mental well-being and learning effectiveness of university students.

Keywords:

mental health, life satisfaction, psychological resilience, quality of life, students, war

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Introduction

The war in Ukraine is the most challenging time in the lives of its people. Everyone in the country has been affected by the war, whether through being mobilised and participating in combat operations, losing loved ones, homes and property, or being forcibly displaced. People have suffered air raids, shelling and power shortages. Active hostilities have forced many to flee their homes and normal lives in search of refuge, both within the country and abroad. This includes university students (Melnik et al., 2024; Mykhaylyshyn et al., 2024; Pypenko et al., 2023; Stadnik et al., 2023; 2025). Fear of death, anxiety, concern for loved ones and being forced to relocate to safer areas all negatively impact mental health and life satisfaction. Life satisfaction is essentially an attitude towards reality formed through emotions and feelings, and it has a significant impact on a person's mental health (Melnik et al., 2025; Samir AlKudsi et al., 2022).

On the other hand, personal resilience is an important factor in the mental well-being of every university student. The APA Executive Director for Practice (Newman, 2002) defines psychological resilience as “the process of adapting and recovering when faced with adversity, tragedy, trauma, or stress”. Psychological resilience is a complex concept determined by a combination of personal, social and cultural factors (Melnik et al., 2020; Southwick et al., 2014). Recent studies (Jackson et al., 2007) have shown that resilience can be strengthened through training and education. This improves the mental health and learning effectiveness of university students during wartime.

The aim of the study. To identify the characteristics of life satisfaction and psychological resilience among university students in different learning environments during wartime.

Materials and Methods

Participants

A survey was carried out among students aged 18 to 35 at Uzhhorod National University in May 2025. The students participating in the study were divided into two groups. Group 1 consisted of 116 university students from western Ukraine who did not leave their place of residence during the war. Of these, 25 (21.5%) were male and 91 (78.4%) were female. Group 2 consisted of 108 university students who were displaced persons residing temporarily in Ukraine and European Union

countries. Of these, 21 (19.4%) were men and 87 (80.6%) were women.

Due to the war in Ukraine, the study was conducted by posting psychological questionnaires on Google Forms. Additionally, all groups of university students were observed during face-to-face and online classes.

Mental Health Measures

The Satisfaction with Life Scale, a 5-item scale, SWLS (Diener et al., 1985) was used to assess students' life satisfaction and quality of life. In the present study, the adapted Ukrainian version of the questionnaire by Stadnik and Melnyk was used (<https://forms.gle/9GoFoTZjWnMxrMW5A>). The SWLS is designed to measure overall perceptions of quality of life. It enables respondents to rate the importance of different areas of life according to their personal values, providing an overall judgement of life satisfaction. Each of the five items is rated using a seven-point Likert scale, where 1 means “strongly disagree” and 7 means “strongly agree”. Higher scores indicate greater life satisfaction. The SWLS scores showed good internal consistency. The Cronbach's alphas were 0.917 for Group 1 students (who did not leave their place of residence) and 0.856 for Group 2 students (who were temporarily displaced), respectively. The Connor-Davidson Resilience Scale, a 10-item scale, CD-RISC-10 (Davidson, 2018) was used to assess psychological resilience, or a person's ability to recover from stressful events, tragedy or trauma. The adapted Ukrainian version of the Stadnik and Melnyk questionnaire (<https://forms.gle/d1TQ17tRoSeLy7RF8>) was used in the present study. This scale has strong psychometric properties and consists of ten items, each of which is rated on a five-point scale from 0 to 4. Higher scores indicate greater resilience. Possible answers include: 0 – Not true at all; 1 – Rarely true; 2 – Sometimes true; 3 – Often true; 4 – True nearly all of the time. The total score is obtained by adding together the points awarded for each of the ten items. The total score can range from 0 to 40 and is assessed as follows: 0–15 points: low level of resilience; 16–20 points: below average level of resilience; 21–25 points: average level; 26–30 points: above average level of resilience; 31–40 points: high level of resilience. The average psychological resilience score is found by taking the arithmetic mean of the total score. This scale is widely used in research and practice related to stress. The

Cronbach's alphas for this scale in the present study were 0.929 (Group 1) and 0.919 (Group 2).

Overall, the CD-RISC-10 scale indicates how well a person copes with stress, while the SWLS scale indicates their general life satisfaction. Resilience is a strong predictor of achieving this satisfaction.

The psychological methods and research procedure used in the study were approved by the Committee on Ethics and Research Integrity of the Scientific Research Institute KRPOCH (protocol no. 026-1/SRIKRPOCH dated 10.08.2024).

Statistical Analysis

All data analysis was performed using IBM SPSS Statistics for Windows (Version 30.0).

The reliability (internal consistency) of the scales was assessed using Cronbach's alpha test to evaluate internal consistency, as well as item-test correlations. Scales show good internal consistency when Cronbach's alpha is greater than 0.7. In addition, Pearson correlations

were performed between all items within each scale (i.e. inter-item correlations). A value greater than 0.4 indicated that an item was measuring the scale homogeneously. Convergent validity was evaluated by correlating total scores on the Satisfaction with Life Scale (SWLS) with total scores on the Connor-Davidson Resilience Scale (CD-RISC-10). Pearson correlation coefficients were used for convergent validity.

Results

Life satisfaction is an important indicator of an individual's quality of life and psychological well-being (Stadnik et al., 2023). Table 1 shows the descriptive statistics for each life satisfaction criterion: mean, standard deviation, statistical sum and variance for Groups 1 and 2. The average score of satisfaction with life was 18.0 points (SD 6.4) for Group 1 and 16.1 points (SD 6.0) for Group 2.

Table 1

Descriptive Statistics for the Satisfaction with Life Scale Items

Items	Mean		Standard deviation		Sum		Variance	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
Item 1	3.3	2.9	1.4	1.3	385.0	316.0	2.0	1.6
Item 2	3.5	3.2	1.4	1.2	410.0	342.0	1.8	1.4
Item 3	3.3	2.9	1.5	1.6	377.0	313.0	2.3	2.4
Item 4	4.2	4.0	1.3	1.4	483.0	436.0	1.7	1.9
Item 5	3.8	3.1	1.7	1.9	435.0	332.0	3.0	3.9
Items sum	18.0	16.1	6.4	6.0	-	-	40.7	35.7

Analysis of the SWLS reliability showed internal consistency scores of 0.917 and 0.856 for students who had not left their usual place of residence (Group 1) and those who had been temporarily displaced (Group 2), respectively.

Similarly, we confirmed that the correlation between items was significant. All items were moderately to highly correlated, with values ranging from 0.563 to 0.896 across both groups (see Table 2).

Table 3 shows the life satisfaction among university students during the wartime.

Among students in Group 1, who did not leave their usual place of residence during the war, the proportion who were extremely dissatisfied with their lives (8.6%) and dissatisfied with their lives (17.2%) were almost 40.0% lower than among those who did change their place of residence (13.0% and 23.1%, respectively). This manifested as a general sense of depression and a lack of motivation to study. It also led to problems in

relationships and social situations, and to physical and emotional symptoms such as fatigue, sleep disturbances and changes in appetite. Additionally, no statistically significant difference in life satisfaction scores was found between the two groups studied (13.8% for Group 1 and 13.3% for Group 2). It should be noted that none of the students in any of the groups were completely satisfied with their lives. This indicates a notable decline in the quality of life experienced by university students during the war.

The study's gender-related findings were as follows: the proportion of men in Group 2 who were extremely dissatisfied with their lives (28.6%) was significantly higher than the proportion of women in Group 2 who were extremely dissatisfied with their lives (9.2%). This indicates constant feelings of sadness, anxiety and depression, as well as low self-esteem. It also indicates social isolation and loneliness, neglect of self-care, and feelings of hopelessness and worthlessness.

Table 2

Inter-Item Correlation Matrix for the Satisfaction with Life Scale Items

Items	Item 1*	Item 2*	Item 3*	Item 4*	Item 5*
Item 1*	-	0.744	0.733	0.673	0.734
Item 2*	0.626	-	0.694	0.538	0.696
Item 3*	0.645	0.626	-	0.667	0.733
Item 4*	0.558	0.604	0.514	-	0.712
Item 5*	0.573	0.528	0.652	0.523	-

Notes. *Correlation is significant at the 0.01 level.

Correlations for Group 1 are shown above the diagonal and those for Group 2 are below the diagonal.

Table 3

The Assessment of Life Satisfaction Levels among University Students during the Wartime

Life satisfaction level	Group 1, %			Group 2, %		
	Total	Male	Female	Total	Male	Female
Extremely dissatisfied	8.6	16.0	6.6	13.0	28.6	9.2
Dissatisfied	17.2	12.0	18.7	23.2	14.3	25.3
Slightly dissatisfied	29.3	28.0	29.7	22.1	14.1	24.1
Neutral	6.1	8.0	5.4	2.8	4.8	2.3
Slightly satisfied	25.0	24.0	25.3	25.9	23.8	26.5
Satisfied	13.8	12.0	14.3	13.0	14.3	12.6
Extremely satisfied	0.00	0.0	0.0	0.00	0.00	0.00
Total	100.0	100.0	100.0	100.0	100.0	100.0

Thus, life satisfaction is an integrative characteristic of an individual's living conditions. It is manifested as their perception of, and attitude towards, changes in life, and it determines their personal satisfaction with life. It may manifest as dissatisfaction with activities, relationships, or general well-being. War is a powerful factor that negatively impacts life satisfaction.

The present study showed that living in safe conditions, even abroad, does not necessarily lead to high life satisfaction. University students who are internally displaced persons and reside in Ukraine or a European Union country are almost 40.0% more likely to report

being extremely dissatisfied (13.0%) or dissatisfied (23.2%) with their lives than students who have not left their usual place of residence. At the same time, this indicator is significantly higher among men than women, which suggests that men have poorer psychological well-being.

Further research aimed to determine the level of psychological resilience among university students, as well as the average level of resilience experienced by this group during the war. The results are shown in Table 4.

Table 4

Levels of Psychological Resilience among University Students during the Wartime

Resilience level	Group 1, %			Group 2, %		
	Total	Male	Female	Total	Male	Female
Low	6.9	8.0	6.6	11.1	14.3	10.3
Below average	13.8	16.0	13.2	16.7	14.3	17.2
Average	34.5	36.0	34.1	24.1	28.6	23.0
Above average	16.4	16.0	16.5	29.6	23.8	31.0
High	28.5	24.0	29.7	18.5	19.1	18.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean value	25.5	23.6	26.0	23.6	23.5	23.7

A high proportion of students in the study groups demonstrate high or above-average psychological resilience, and this does not differ significantly in statistical terms between the groups (Group 1: 28.5% and 16.4%; Group 2: 18.5% and 29.6%, respectively). This indicates an equal ability to withstand stress and emotional tension. It should be noted that the proportion of students in Group 2 who have low psychological resilience is almost twice that in Group 1: specifically, 11.1% of students in Group 2 fall into this category, compared to 6.9% in Group 1. This suggests that a significant proportion of Group 2 students struggle to adapt to stressful situations, recover from difficulties and setbacks, maintain a positive attitude, and perform well in challenging and uncertain circumstances.

The results of the study show that women in Group 1 have higher levels of psychological resilience than men in this group. This is indicated by their highest (29.7%) and lowest (6.6%) levels of psychological resilience

compared to other gender groups. This manifests as emotional and behavioural flexibility, and the ability to seek support, maintain optimism, and think positively despite the difficulties of martial law. Notably, the largest proportion of men in Group 2 have low psychological resilience (14.3%), the highest proportion of all gender groups. This manifests as difficulty in maintaining psychological balance, which indicates mental maladjustment and hidden depression.

The mean level of psychological resilience is higher for students in Group 1 than for those in Group 2. The respective percentages are 25.5% and 23.6%. This suggests that they are optimistic, positive thinkers who can adapt their behaviour in different situations and find new solutions to problems. At the same time, the level of psychological resilience is significantly higher among women in Group 1 (26.0%) than among men in the same group (23.6%). This demonstrates their ability to adapt successfully to life's difficulties.

The lowest average psychological resilience score was found among men in Group 2 (23.5%). We believe this is due to the presence of acute psychogenic factors associated with possible mobilisation, loss of relatives, air raids and shelling, and difficulties with employment. These factors may manifest as substance abuse, somatic disorders or antisocial behaviour, and require further research.

Consequently, we observed a significant decrease in the psychological resilience of students who were forced to relocate during the war. On average, students in Group 1 demonstrate higher levels of psychological resilience

than those in Group 2. Additionally, the proportion of students in Group 2 with low psychological resilience is almost twice that in Group 1. The gender breakdown shows that women in Group 1 have a higher level of psychological resilience (29.7%), whereas men in Group 2 have a lower level (14.3%). These figures represent the highest and lowest levels observed across all gender groups.

Table 5 shows the descriptive statistics for each item of the resilience scale, including the mean, standard deviation, statistical sum and variance for Groups 1 and 2.

Table 5
Descriptive Statistics for the Resilience Scale Items

Items	Mean		Standard deviation		Skewness		Kurtosis	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
Item 1	2.66	2.68	0.94	0.99	-0.04	-0.06	-0.66	-0.85
Item 2	2.69	2.56	0.93	1.02	-0.43	-0.64	0.32	0.59
Item 3	2.54	2.37	0.77	0.78	0.19	0.20	-0.39	-0.28
Item 4	2.72	2.41	0.79	0.84	-0.74	-1.37	1.42	1.07
Item 5	2.48	2.29	0.85	0.75	0.19	0.15	-0.56	-0.24
Item 6	2.51	2.35	0.89	0.89	-0.52	-0.76	0.37	0.97
Item 7	2.34	2.15	0.85	0.88	0.39	0.12	-0.38	-0.59
Item 8	2.57	2.34	0.88	1.01	0.18	-0.13	-0.37	-0.15
Item 9	2.39	2.14	1.01	0.96	-0.23	-0.22	-0.59	-0.39
Item 10	2.59	2.36	1.15	1.20	-0.28	-0.04	-1.11	-1.17

Analysis of the reliability of the CD-RISC-10 revealed internal consistencies of 0.929 and 0.919 (Cronbach's alpha) for students who had not left their usual place of residence (Group 1) and those who had been temporarily displaced (Group 2). Similarly, we confirmed that the inter-item correlation was significant.

All items had moderate to high correlations with the scale (item-test correlation), with values ranging from 0.404 to 0.738 in both groups (see Table 6). In other words, the item-total correlation coefficients for the CD-RISC-10 scale were satisfactory, indicating an adequate degree of item homogeneity.

Table 6
Inter-Item Correlation Matrix the Resilience Scale Items

Items	Item 1*	Item 2*	Item 3*	Item 4*	Item 5*	Item 6*	Item 7*	Item 8*	Item 9*	Item 10*
Item 1*	–	0.581	0.468	0.474	0.738	0.518	0.585	0.634	0.549	0.403
Item 2*	0.688	–	0.608	0.560	0.630	0.706	0.614	0.578	0.740	0.519
Item 3*	0.530	0.680	–	0.555	0.683	0.568	0.695	0.643	0.607	0.489
Item 4*	0.404	0.627	0.450	–	0.544	0.642	0.543	0.437	0.608	0.454
Item 5*	0.615	0.525	0.536	0.475	–	0.639	0.757	0.795	0.732	0.440
Item 6*	0.437	0.619	0.470	0.617	0.590	–	0.631	0.629	0.833	0.494
Item 7*	0.608	0.625	0.678	0.420	0.640	0.527	–	0.660	0.734	0.577
Item 8*	0.593	0.556	0.593	0.436	0.729	0.528	0.745	–	0.661	0.456
Item 9*	0.419	0.618	0.529	0.506	0.632	0.718	0.635	0.525	–	0.506
Item 10*	0.463	0.545	0.473	0.416	0.471	0.448	0.643	0.464	0.497	–

Note. *Correlation is significant at the 0.01 level.

Correlations for Group 1 are shown above the diagonal and those for Group 2 are below the diagonal.

The results for the internal consistency of the scales (the Satisfaction with Life Scale (SWLS) and the Connor-Davidson Resilience Scale (CD-RISC-10) are presented in Table 7.

The internal consistency results showed that the SWLS and CD-RISC-10 scales had a high degree of internal consistency, with Cronbach's alpha values above 0.85. All item correlations were above 0.4, indicating that all items contributed well to measuring the SWLS and CD-RISC-10 scales. As we expected, validity evidence revealed a positive and significant relationship between life satisfaction scores (SWLS) and resilience scores

(CD-RISC-10). The significant positive strong correlation ($r=0.811, p<0.001$) provided evidence of convergent validity.

Table 7
Internal Consistency for the SWLS and CD-RISC-10

Measures	Cronbach's alpha values	
	Group 1	Group 2
Satisfaction with Life Scale (SWLS)	0.917	0.856
Connor-Davidson Resilience Scale (CD-RISC-10)	0.929	0.919

Discussion

A study of scientific publications has revealed that most scientists view life satisfaction as a complex and multifaceted concept that reflects an individual's overall quality of life (Melnyk et al., 2025; Mishra & Bharti, 2024; Sabatini et al., 2023).

Stappen (2012) defined life satisfaction as a concept that encompasses both the conditions and circumstances necessary for an individual to function fully and their evaluation of their actual existence.

Other scientists define quality of life as comprising spiritual, material, socio-cultural, environmental, and demographic components. In other words, it could be argued that quality of life encompasses all aspects of human existence (Degroote et al., 2014; Elshaer, 2023; Jovanovic & Brdar, 2018).

Additionally, researchers believe that satisfaction with certain aspects of life is linked to one's emotional attitude towards life, oneself, and others (Veenhoven, 2001). This suggests that life satisfaction encompasses positive experiences and a positive attitude towards oneself and others (Milewska-Buzun et al., 2023).

We believe that life satisfaction is a state characterised by the fulfilment of one's current physical, psychological, social and spiritual needs, in line with one's life aspirations, opportunities, requirements and expectations.

The present study employed the Satisfaction with Life Scale (SWLS), the most widely used instrument for measuring life satisfaction. Its psychometric properties (Emmerson et al., 2017) have been thoroughly analysed worldwide.

Our research showed that the proportion of students who are internally displaced persons who are extremely dissatisfied (13.0%) and dissatisfied (23.2%) is almost 40.0% higher than the proportion of those who did not leave their usual place of residence who are extremely dissatisfied (8.6%) and dissatisfied (17.2%). These findings are consistent with our previous research in this area (Melnyk et al., 2025).

The data obtained suggest that staying in safer regions during wartime can lead to mental health and psychological well-being disorders, despite the socio-economic and psychological difficulties involved. Conversely, certain studies have suggested that enhancing a person's psychological resilience can improve life satisfaction and psychological well-being (Eisenberg et al., 2016).

Current scientific periodicals present various views on the concept of "psychological resilience".

According to McGinnis (2018), resilience is the psychological ability to withstand and overcome adversity positively, thereby restoring the same level of well-being as before the negative event occurred.

Some researchers consider psychological resilience to be the ability to successfully adapt to life's difficulties (Carril & Liébana-Presa, 2017; Yates et al., 2015). It is associated with various factors, including efficiency, optimism, hope and a greater ability to overcome problems, as well as greater professionalism and a more positive cognitive assessment (Stewart & Yuen, 2011).

Other scholars characterise psychological resilience as a process of positive adaptation and development in situations that pose a significant threat to human life or functioning (Southwick, 2014).

Psychological resilience enables individuals to actively adapt to serious adversity, recover from stressors, and maintain mental health (Meulen et al., 2020; Ssenyonga et al., 2013). It is a powerful personal resource that helps individuals adapt to change after experiencing trauma, enabling them to return to normal functioning.

It should be noted that psychological resilience encompasses an individual's ability to access various resources in response to challenges (Chen et al., 2016). Some researchers have also found an association between psychological resilience and an improved quality of life (Chow, 2021). Meanwhile, Pypenko et al. (2020) and Melnyk et al. (2022) examined the effect of distance learning on the social and psychological well-being of university students.

We believe that psychological resilience is not about being protected from stress; rather, it is about a person's ability to adapt well to a situation. Not everyone is resilient, nor do they all react to failure in the same way. The definition of psychological resilience depends on a variety of factors.

The current study found a positive correlation between resilience and life satisfaction. A significant decrease in psychological resilience was observed among students in Group 2, who had relatively low levels of life satisfaction. On average, students in Group 1 had a higher level of psychological resilience (25.5%) than those in Group 2 (23.6%). Furthermore, the proportion of students in Group 2 with low psychological stability was almost double that in Group 1.

These results are consistent with previous studies investigating resilience and life satisfaction among university students in Romania (Hartley, 2012), Malaysia (Cazan & Truta, 2015), Greece (Samani et al., 2007) and Saudi Arabia (Aboalshamat et al., 2018).

Of the various factors interacting with psychological resilience, gender is a particularly important factor, as shown by the above-mentioned studies. Researchers (Allan et al., 2013; Erdogan et al., 2015; Zurita-Ortega et al., 2018) have found that male university students tend to be more resilient than female students. Numerous studies conducted over many years indicate that gender does not affect resilience levels on the CD-RISC 10 scale. No statistically significant correlations were identified in the research of Arrogante et al. (2017), Cai et al. (2019), Mealer et al. (2016) and Yu et al. (2020).

The present study revealed some interesting findings. On average, women in Group 1 exhibited significantly greater psychological resilience than men (26.0% and 23.6%, respectively). Meanwhile, the difference between the percentage of men and women in Group 2 with this indicator is negligible (23.5% and 23.7%, respectively). In our opinion, this is related to the living conditions experienced by university students during the war. Forced displacement reduces their ability to adapt to difficulties in life, regulate their emotions, communicate with others, use social connections to overcome

difficulties and maintain mental health, as well as achieving success in various areas of life. Therefore, it is necessary to develop and implement psychological intervention, social assistance and support programmes for university students more actively during wartime. These programmes should improve students' mental wellbeing and enhance their learning effectiveness.

Conclusions

The war in Ukraine is having a significant impact on the mental health of its citizens. Like everyone else, students are trying to adapt to the situation, either by leaving their homes for safer regions of Ukraine or EU countries, or by staying put. Fear of death, anxiety, concern for loved ones and being forced to relocate all negatively impact mental health, life satisfaction and psychological resilience.

Analysis of scientific publications shows that most researchers consider life satisfaction to be a complex, multifactorial construct subject to structural change, which serves as a general assessment of an individual's quality of life. We define life satisfaction as a state characterised by the fulfilment of one's current social, physical, psychological and vital needs in accordance with one's life aspirations, opportunities, requirements and expectations.

The present study showed that living in safe conditions, even abroad, does not necessarily lead to a high quality of life. University students who are internally displaced persons and reside in Ukraine or a European Union country report levels of absolute and general dissatisfaction with their lives that are almost 1.4 times higher than students who have not left their usual place of residence. At the same time, this indicator is significantly higher among men than women, suggesting poorer psychological well-being among the former. The data obtained indicate that remaining in safer regions or abroad during wartime contributes to psychological distress and dissatisfaction with life, even in difficult socio-economic and psychological conditions.

Psychological resilience is a person's ability to adapt well to situations, and it depends on a variety of factors. This study found that students who were forced to relocate during wartime experienced a significant decrease in psychological resilience. On average, students in Group 1 have a higher level of psychological resilience (25.5%) than those in Group 2 (23.6%). Additionally, the proportion of students in Group 2 with low psychological resilience is almost twice that in Group 1. Gender differences include a higher prevalence of high psychological resilience among women in Group 1 (29.7%) than among men in Group 2 (14.3%). The latter figure represents the highest prevalence among all gender groups.

The current study therefore found a positive strong correlation ($r=0.811$, $p<0.001$) between psychological resilience and life satisfaction among university students during wartime. A significant decrease in psychological resilience was observed among students in Group 2, who had relatively low levels of life satisfaction. This is why it is necessary to develop psychological intervention, social assistance and support programmes more actively

during the war in Ukraine. These programmes should improve the mental well-being and learning effectiveness of university students.

Ethical Approval

The psychological methods and research procedure used in the study were approved by the Committee on Ethics and Research Integrity of the Scientific Research Institute KRPOCH (protocol no. 026-1/SRIKRPOCH dated 10.08.2024)

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References

Aboalshamat, K. T., Alsiyud, A. O., Al-Sayed, R. A., Alreddadi, R. S., Faqiehi, S. S., & Almehmadi, S. A. (2018). The relationship between resilience, happiness, and life satisfaction in dental and medical students in Jeddah, Saudi Arabia. *Nigerian Journal of Clinical Practice*, 21(8), 1038–1043. https://doi.org/10.4103/njcp.njcp_278_17

Allan, J., McKenna, J., & Dominey, S. (2013). Degrees of resilience: Profiling psychological resilience and prospective academic achievement in university inductees. *British Journal of Guidance and Counselling*, 42(1), 9–25. <https://doi.org/10.1080/03069885.2013.793784>

Arrogante, O., & Aparicio-Zaldivar, E. (2017). Burnout and health among critical care professionals: The mediational role of resilience. *Intensive and Critical Care Nursing*, 42, 110–115. <https://doi.org/10.1016/j.iccn.2017.04.010>

Cai, W., Lian, B., Song, X., Hou, T., Deng, G., & Li, H. (2020). A cross-sectional study on mental health among health care workers during the outbreak of Corona Virus Disease 2019. *Asian Journal of Psychiatry*, 51, Article 102111. <https://doi.org/10.1016/j.ajp.2020.102111>

Cazan, A.M., & Truta, C. (2015). Stress, resilience and life satisfaction in college students. *Revista de Cercetare si Interventie Sociala*, 48, 95–108. https://www.rcis.ro/images/documente/rcis48_08.pdf

Chen, X., Mao, Y., Kong, L., Guopeng, L., Xin, M., Lou, F., & Li, P. (2016). Resilience moderates the association between stigma and psychological distress among family caregivers of patients with schizophrenia. *Personality and Individual Differences*, 96, 78–82. <https://doi.org/10.1016/j.paid.2016.02.062>

Chow, P.-Ch. (2021). Quality of life, psychological resilience, personality traits and illness perception in grown-up congenital heart patients in Hong Kong. *International Journal of Cardiology Congenital Heart Disease*, 6, Article 100279. <https://doi.org/10.1016/j.ijcchd.2021.100279>

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>

Davidson, J. R. T. (2018). *Connor-Davidson Resilience Scale (CD-RISC) manual*. www.cd-risc.com

Degroote, S., Vogelaers, D., & Vandijck, D. M. (2014). What determines health-related quality of life among people living with HIV: An updated review of the literature. *Archives of Public Health*, 72, Article 40 <https://doi.org/10.1186/2049-3258-72-40>

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Eisenberg, D., Lipson, S. & Posselt, J. (2016). Promoting resilience, retention, and mental health. *New Directions for Student Services*, 2016(156), 87–95. <https://doi.org/10.1002/ss.20194>

Elshaer, I.A. (2023). Front-line hotel employees mental health and quality of life post COVID-19 pandemic: The role of coping strategies. *Helijon*, 9(6), Article e16915. <https://doi.org/10.1016/j.helijon.2023.e16915>

Emerson, S. D., Guhn, M., & Gadermann, A. M. (2017). Measurement invariance of the Satisfaction with Life Scale: Reviewing three decades of research. *Quality of Life Research*, 26, 2251–2264. <https://doi.org/10.1007/s11136-017-1552-2>

Erdogan, E., Ozdogan, O., & Erdogan, M. (2015). University students' resilience level: The effect of gender and faculty. *Procedia-Social and Behavioral Sciences*, 186, 1262–1267. <https://doi.org/10.1016/j.sbspro.2015.04.047>

Fernández-Martínez, E., Andina-Díaz, E., Fernández-Peña, R., García-López, R., Fulgueiras-Carril, I., & Liébana-Presa, C. (2017). Social networks, engagement and resilience in university students. *International Journal of Environmental Research and Public Health*, 14(12), Article 1488. <https://doi.org/10.3390/ijerph14121488>

Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, 60(1), 1–9. <https://doi.org/10.1111/j.1365-2648.2007.04412.x>

Jovanović, V., & Brdar, I. (2018). The cross-national measurement invariance of the Satisfaction with Life Scale in a sample of undergraduate students. *Personality and Individual Differences*, 128, 7–9. <https://doi.org/10.1016/j.paid.2018.02.010>

Hartley, M. T. (2012). Assessing and promoting resilience: An additional tool to address the increasing number of college students with psychological problems. *Journal of College Counseling*, 15(1), 37–51. <https://doi.org/10.1002/j.2161-1882.2012.00004.x>

McGinnis, D. (2018). Resiliencia, eventos de la vida y bienestar durante la mediana edad: Examinar los subgrupos de resiliencia. *Revista Desarrollo Adultos*, 25, 198–221. <https://doi.org/10.3390/su12031002>

Mealer, M., Schmiege, S.J., & Meek, P. (2016). The Connor-Davidson resilience scale in critical care nurses: A psychometric analysis. *Journal of Nursing Measurement*, 24(1), 28–39. <https://doi.org/10.1891/1061-3749.24.1.28>

Meulen, E., Velden, P., Aert, R., & Veldhoven, M. (2020). Longitudinal associations of psychological resilience with mental health and functioning among military personnel: A meta-analysis of prospective studies. *Social Science & Medicine*, 255, Article 112814. <https://doi.org/10.1016/j.socscimed.2020.112814>

Melnik, Y., Stadnik, A., Mykhaylyshyn, U., & Pypenko, I. (2025). The impact of war on mental health of young students. *International Journal of Psychology & Psychological Therapy*, 25(2), 245–254. <https://www.ijpsy.com/volumen25/num2/689.html>

Melnik, Y. B., Stadnik, A. V., Mykhaylyshyn, U. B., Vveinhardt, J., De Frias, C. M., & Pypenko, I. S. (2024). Mental health and life satisfaction of university students influenced by war. *International Journal of Science Annals*, 7(2), 35–45. <https://doi.org/10.26697/ijsa.2024.2.6>

Melnik, Yu. B., Stadnik, A. V., Pypenko, I. S., Kostina, V. V., & Yevtushenko, D. O. (2022). Impact of COVID-19 on the social and psychological state of athletes. *The Journal of Sports Medicine and Physical Fitness*, 62(2), 297–299. <https://doi.org/10.23736/S0022-4707.21.12401-6>

Melnik, Yu. B., Stadnik, A. V., & Pypenko, I. S. (2020). Resistance to post-traumatic stress reactions of vulnerable groups engaged in pandemic liquidation. *International Journal of Science Annals*, 3(1), 35–44. <https://doi.org/10.26697/ijsa.2020.1.5>

Milewska-Buzun, M., Cybulski, M., Baranowska, A., Kózka, M., & Paradowska-Stankiewicz, I. (2023). Quality of life in HIV-positive people in Poland treated in the city of Bialystok: A cross-sectional study. *Journal of Clinical Medicine*, 12(17), Article 5593. <https://doi.org/10.3390/jcm12175593>

Mishra, N., & Bharti, T. (2024). Exploring the nexus of social support, work-life balance and life satisfaction in hybrid work scenario in learning organizations. *The Learning Organization: An International Journal*, 31(1), 27–47. <https://doi.org/10.1108/TLO-08-2022-0099>

Mykhaylyshyn, U. B., Stadnik, A. V., Melnyk, Yu. B., Vveinhardt, J., Oliveira, M. S., & Pypenko, I. S. (2024). Psychological stress among university students in wartime: A longitudinal study. *International Journal of Science Annals*, 7(1), 27–40. <https://doi.org/10.26697/ijsa.2024.1.6>

Newman, R. (2002). The road to resilience. *Monitor on Psychology*, 33(9), 62. <https://www.apa.org/monitor/oct02/pp>

Pypenko, I. S., Maslov, Yu. V., & Melnyk, Yu. B. (2020). The impact of social distancing measures on higher education stakeholders. *International*

Journal of Science Annals, 3(2), 9–14.
<https://doi.org/10.26697/ijsa.2020.2.2>

Pypenko, I. S., Stadnik, A. V., Melnyk, Yu. B., & Mykhaylyshyn, U. B. (2023). The impact of the war in Ukraine on the psychological well-being of students. *International Journal of Science Annals*, 6(2), 20–31. <https://doi.org/10.26697/ijsa.2023.2.2>

Sabatini, S., Martyr, A., Gamble, L., Jones, I., Collins, R., Matthews, F., Knapp, M., Thom, J., Henderson, C., Victor, C., Pentecost, C., & Clare, L. (2023). Are profiles of social, cultural, and economic capital related to living well with dementia? Longitudinal findings from the IDEAL programme. *Social Science & Medicine*, 317, Article 115603. <https://doi.org/10.1016/j.socscimed.2022.115603>

Samani, S., Jokar, B., & Sahragard, N. (2007). Effects of resilience on mental health and life satisfaction. *Iranian Journal of Psychiatry and Clinical Psychology*, 13(3), 290–295. <https://ijpcpiums.ac.ir/article-1-275-en.html>

Samir AlKudsi, Z., Hany Kamel, N., El-Awaisi, A., Shraim, M., & Saffouh El Hajj, M. (2022). Mental health, burnout and resilience in community pharmacists during the COVID-19 pandemic: A cross-sectional study. *Saudi Pharmaceutical Journal*, 30(7), 1009–1017. <https://doi.org/10.1016/j.jsps.2022.04.015>

Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5(1), Article 25338. <https://doi.org/10.3402/ejpt.v5.25338>

Ssenyonga, J., Owens, V., & Olema, D. K. (2013). Posttraumatic growth, resilience, and posttraumatic stress disorder (PTSD) among refugees. *Procedia – Social and Behavioral Sciences*, 82, 144–148. <https://doi.org/10.1016/j.sbspro.2013.06.238>

Stadnik, A. V., Melnyk, Yu. B., Mykhaylyshyn, U. B., & de Matos, M. G. (2023). Peculiarities of the psychological well-being and social adaptation of young students and cadets in wartime conditions. *International Journal of Science Annals*, 6(1), 22–30. <https://doi.org/10.26697/ijsa.2023.1.7>

Stadnik, A. V., & Melnyk, Yu. B. (2023). *Shkala zadovolenosti zhyttiam [Satisfaction with Life Scale]*. KRPOCH. <https://doi.org/10.26697/sri.krpoch/stadnik.meln.yk.3.2023>

Stadnik, A. V., & Melnyk, Yu. B. (2025). *Shkala zhytystiikosti Konnora-Devidsona [Connor-Davidson Resilience Scale]*. KRPOCH. <https://doi.org/10.26697/sri.krpoch/stadnik.meln.yk.3.2025>

Stadnik, A. V., Mykhaylyshyn, U. B., Wasilewski, B., & Pypenko, I. S. (2025). Psychological distress and healthy lifestyle among university students in wartime. *International Journal of Science Annals*, 8(1), 33–44. <https://doi.org/10.26697/ijsa.2025.1.3>

Stappen, L. (2012). *Happiness and quality of life*. <https://edepot.wur.nl/215820>

Stewart D. E., & Yuen, T. (2011). A systematic review of resilience in the physically ill. *Psychosomatics*, 52(3), 199–209. <https://doi.org/10.1016/j.psym.2011.01.036>

Veenhoven, R. (2001). Quality-of-life and happiness: Not quite the same. In G. DeGirolamo (Ed.), *Salute e qualita dell'vida* (pp. 67–95), Centro Scientifico Editore. <https://repub.eur.nl/pub/8753>

Yates, T., Tyrell, F., & Masten, A. (2015). Resilience theory and the practice of positive psychology from individuals to societies. In Joseph S. (Ed.), *Positive Psychology in Practice: Promoting Human Flourishing in Work, Health, Education, and Everyday Life, Second Edition*. <https://doi.org/10.1002/9781118996874.ch44>

Yu, F., Cavadino, A., Mackay, L., Ward, K., King, A., & Smith, M. (2020). Physical activity and personal factors associated with nurse resilience in intensive care units. *Journal of Clinical Nursing*, 29(17–18), 3246–3262. <https://doi.org/10.1111/jocn.15338>

Zurita-Ortega, F., Chacón-Cuberos, R., Castro-Sánchez, M., Gutiérrez-Vela, F. L., & González-Valero, G. (2018). Effect of an intervention program based on active video games and motor games on health indicators in university students: A pilot study. *International Journal of Environmental Research and Public Health*, 15(7), Article 1329. <https://doi.org/10.3390/ijerph15071329>

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