DOI: https://doi.org/10.29038/2227-1376-2022-39-sze

UDK 159.99

# SUBJECTIVE ASSESSMENT OF CHANGES IN LIFE DURING COVID-19 PANDEMIC: COMPARISON OF POLISH AND UKRAINIAN ADULTS

## Ewa Małgorzata Szepietowska

Maria Sklodovska-Curie University, Lublin, Poland <u>ewa.szepietowska@mail.umcs.pl</u> https://orcid.org/0000-0003-3383-0353

### Ewa Zawadzka

Maria Sklodowska-Curie University, Lublin, Poland <u>ewa.zawadzka@mail.umcs.pl</u> https://orcid.org/0000-0002-0909-8943

## Sara Filipiak

Maria Sklodowska-Curie University, Lublin, Poland <u>sara.filipiak@mail.umcs.pl</u> <u>https://orcid.org/0000-0001-7818-7168</u>

**Purpose**. The first stage of the COVID-19 pandemic was associated with the growing sense of massive trauma and loss. The current research suggests that the past two years of the pandemic are perceived in terms of both losses and gains. The study aimed to compare opinions expressed by adult Poles and Ukrainians, about changes in various spheres of life resulting from the two years of the pandemic.

**Methods.** The survey was carried out online using COVID-19 Sense of Life Changes Questionnaire. Responses were provided by 270 Poles and 109 Ukrainians. The participants were expected to report whether and in what way (positive, negative or none) specific areas of their life changed during the pandemic.

**Results.** Respondents from Poland and Ukraine noticed both negative and positive changes in various areas of life, resulting from the pandemic. Opinions related to many issues expressed by the two groups were similar, however respondents from Ukraine tended to assess the two-year period of the pandemic in more positive terms (as a time of minor negative changes or time that did not change much in their lives).

**Conclusions**. Our findings reflect the fact that there is a change in emotional and knowledge-based evaluation of the two-year pandemic. Further research should

ISSN 2308-3743 (Online), ISSN 2227-1376 (Print)

<sup>©</sup> Szepietowska E., Zawadzka E., Sara F., 2022. Ця стаття відкритого доступу на умовах СС ВУ-NС 4.0

look into social and cultural contexts which may explain psychological response to COVID-19 pandemic.

Key words: COVID-19 pandemic, subjective assessment of changes in life, Poland, Ukraine.

#### Шеп'єтовська Ева Малгожата, Завадзька Єва, Філіпяк Сара. Суб'єктивна оцінка змін у житті під час пандемії COVID-19: порівняння дорослих поляків та українців.

Мета. Перший етап пандемії COVID-19 був пов'язаний із наростаючим відчуттям масових травм і втрат. Дослідження показує, що останні два роки пандемії сприймаються як з точки зору втрат, так і виграшів. Метою дослідження було порівняння думок дорослих поляків та українців щодо змін у різних сферах життя внаслідок двох років пандемії.

Методи. Опитування проводилося онлайн за допомогою опитувальника COVID-19 Sense of Life Changes. Відповіді надали 270 поляків та 109 українців. Очікувалося, що учасники повідомлять, чи змінилися та яким чином (позитивно, негативно чи ні) окремі сфери їхнього життя під час пандемії.

**Результати.** Респонденти з Польщі та України помітили як негативні, так і позитивні зміни в різних сферах життя внаслідок пандемії. Думки щодо багатьох питань, висловлені двома групами, були подібними, проте респонденти з України, як правило, оцінювали дворічний період пандемії більш позитивно (як час незначних негативних змін або час, який мало змінився в їхньому житті).

Висновки. Наші результати відображають той факт, що відбулася зміна в емоційній та когнітивно орієнтованій оцінці дворічної пандемії. Подальші дослідження мають розглянути соціальний та культурний контекст, який може пояснити психологічну реакцію на пандемію COVID-19.

Ключові слова: пандемія COVID-19, суб'єктивна оцінка змін у житті, Польща, Україна.

**Introduction.** The first confirmed case of COVID-19 in Ukraine was reported on 3 March 2020. The first death was reported on 13 March 2020 (Åslund, 2020). The first confirmed case of COVID-19 in Poland was reported on 4 March 2020, and the first death was reported on 12 March (full information). Our survey took place from September to December 2021. By 30 Sept. 2021 a total of 2.53 million cases were identified in Ukraine, and by the end of December 2021 there were 3.85 million cases (full information); in Poland the respective numbers were 2.91 and 4.11 million (full information). The consecutive waves of COVID-19 pandemic affected many aspects of life in adverse ways. Economic, social and psychological losses were observed (Long et al., 2022; Singh et al., 2021).

Because of their gravity, the first waves of the pandemic were described by such terms as massive trauma and massive loss (Lenzen et al., 2020) and collective traumatic experience (Kostruba, 2021). The intensity of perceived in response to the pandemic depended trauma on sociodemographic, personality as well as economic and political factors, however many similarities were found in responses provided by subjects from different countries. Research carried out in Poland and in Ukraine during the first stages of COVID-19 pandemic showed significant deterioration of mental health, particularly in students (Ochnik et al, 2021; Zasiekina, 2021), healthcare workers (Martsenkovskyi et al., 2022), women (Kostruba, 2021) and individuals with lower socioeconomic status (Sozański et al., 2021). The early phase of the pandemic was associated with increased anxiety, depression, uncertainty about the future, and more severe psychosomatic problems, however during the subsequent stages of the pandemic (e.g., in 2021) some of these symptoms were found to be less pronounced (O'Connor et al., 2021; Robinson et al., 2022). Research involving individuals of Polish and Ukrainian nationality showed that university students from Ukraine, compared to those from Poland, presented less severe signs of burnout (Długosz, Zoska, 2020), lower level of depression, anxiety and distress (Ochnik et al., 2021). Young Ukrainians were found to cope with quarantine and distance education better than Polish students and had better mental health (Długosz, Kryvachuk, 2021). Furthermore, young people from both countries reported negative consequences of the pandemic, such as those affecting their families (e.g., loss of work by parents), or their education (e.g., fear of returning to school after a period of online education), but it was Ukrainian teenagers that were more likely to notice advantages of online learning (Długosz, 2021). Research also showed that the factors which were related to stronger fear of the pandemic among Poles included older age, lower financial status combined with lower education, neuroticism and the situational variables, i.e., lockdown, distance, inability to satisfy one's needs, and following information in the mass media (Długosz, 2021), as well as female gender (Ochnik et al., 2021). Evidence from Ukrainian research showed that individuals aged 60+ were in better emotional condition, although this is a high-risk group for COVID-19 (Dembitskyi et al., 2020). Studies carried out during the past two years of the pandemic showed changes in the perceptions of the related losses and possible gains. The gains reported in these studies included: opportunity to maintain work-life balance and have better control of work (Ipsen et al., 2021), opportunity to work and study online (Saikat et al., 2021), increased relationship investment, gratefulness, and patience (Cox et al., 2021), slower pace of life (Hou et al., 2020), greater attention to one's own health (Ruiz et al., 2021), and changes in the sources of life's meaning (Chen et al., 2020). By reference to the earlier research findings, our study aimed to compare subjective opinions expressed by adult Poles and Ukrainians in relation to changes in various spheres of life resulting from the two-year pandemic.

Methods. The study was conducted according to the guidelines of the Declaration of Helsinki. The design of the study was approved by the local Research Ethics Commission (protocol code 8/2021). The results discussed in this article are part of a wider research project in which respondents from various countries in Europe, Asia and North America participated (Szepietowska, Zawadzka, Filipiak, 2022). The online survey, intended for adults, was carried out from 1 September to 12 December 2021, with the use of Google Formats. A snowball method was applied in collecting data. General information about the purpose of the study was sent out via private e-mail and Facebook, with a link to demographic survey questions and to the questionnaire. The tools i.e., COVID-19 Sense of Life Changes Questionnaire (COVID-19 SLCHQ) and self-report questionnaire to collect demographic (nationality), personal (gender, age, education), and medical data (personal and family history of COVID-19) were prepared in Polish and Ukrainian language versions. The analyses took into account data related to 369 participants: 270 from Poland and 109 from Ukraine. In COVID-19 SLCHQ the respondents were asked whether and in what way (negative, positive, neither) COVID-19 pandemic had changed their life, and its various aspects. They were asked to take into account the years 2020 and 2021. The items (a total of 17) referred to such issues as relations with children/grandchildren, parents and partner, finances. work. religion/spirituality, self-care, social activity, etc., and the final statement (17) was related to opinions about the future. The respondents were asked to assess the changes in the various aspects of life, by selecting one of the responses on a 7-point scale, where 1 = dramatically negative, 2 = very negative, 3 = rather negative, 4 = neither negative nor positive, 5 = rather positive, 6 = very positive, 7 = extremely positive. Hence, a higher score reflects an opinion that the changes which occurred during COVID-19 pandemic were positive, and a lower score corresponds to an opinion that the changes were negative. Option 0 = not applicable was used to account for individual differences (e.g., no children, no partner, etc.).

Survey data were first exported to Excel from Google Format and were then transferred to SPSS version 26. Participants' characteristics contain data related to frequency, and percentages and – in the case of quantitative data - means and standard deviations. A Pearson's chi-squared tests of independence were performed to compare categorical variables in the two groups. Because of the approximately normal distribution of the variables, comparative assessment of independent quantitative data was conducted using Student's t-test (for two groups) and two-way ANOVA. Spearman's Rank correlation coefficient was used for correlation analyses. Significance level of  $p \le 0,05$  was adopted in all the analyses.

**Results.** There were no differences between the groups in the number of females and males, education level, and number of subjects with or without family history of COVID-19 disease (Table 1). In the group of Polish subjects there was a disproportion between the individuals who had been ill and those who had not experienced the disease, whereas in the group of Ukrainians these numbers were similar. Respondents from Poland (M = 36,69, SD = 14,04) were significantly older that those from Ukraine (M = 31,49, SD = 13,83, t = 3,26, p = 0,001).

Table 1.

	the respondents r		
variables	Poland (P)	Ukraine (U)	Pearson's
	n = 260	n =109	$\chi^2(\mathbf{p})$
	n (%)	n (%)	
gender			
- female	200 (76,92)	92 (84,40)	2,603 (0,106)
- male	60 (23,08)	17 (15,60)	
education level			
- lower (incomplete			
primary/complete primary/			
secondary)	86 (33,08)	34 (31,19)	0,124 (0,724)
- higher (university degree/PhD)	174 (66,92)	75 (68,81)	
COVID-19 history			
- yes	78 (30)	45 (41,28)	
- no	182 (70)	64 (58,72)	4,01 (0,035)*
COVID-19 in relatives			
- yes	151 (58,08)	52 (47,71)	3,34 (0,07)
- no	109 (41,92)	57 (52,29)	
* .0.05			

Characteristics of the respondents from Poland and Ukraine.

\*p≤0.05.

Since some items did not apply to some of the respondents (e.g., those having no children, parents or following no religion), the overall COVID-19 SLCHQ index was calculated taking into account 11 out of 17 items (100% responses). The results are shown in Table 2 and Figure 1.

Table 2.

Г	spondents i	rom Polanc	i and Ukraine	
changes related to	Poland	Ukraine	t (p)	commentary
	M (SD)	M (SD)		
partner*	4,14 (1,45)	3,78 (1,54)	1,88 (0,06) <sup>g</sup>	P > U
children/grandchildren*	4,44 (1,38)	3,59 (1,71)	3,62 (0,001)***	<b>P</b> > U
parents*	4,28 (1,29)	4,18 (1,74)	0,514 (0,61)	P = U
friends	3,82 (1,24)	3,95 (1,50)	-0,892 (0,37)	P = U
co-workers*	3,96 (1,15)	3,78 (1,42)	1,11 (0,26)	P = U
mental health	3,43 (1,27)	3,72 (1,47)	-1,89 (0,058) <sup>g</sup>	P < U
physical health	3,37 (1,32)	3,61 (1,44)	-1,56 (0,12)	P = U
work*	3,95 (1,47)	3,87 (1,44)	0,44 (0,66)	$\mathbf{P} = \mathbf{U}$
finances	3,65 (1,23)	3,55 (1,45)	0,67 (0,50)	$\mathbf{P} = \mathbf{U}$
mental efficiency	3,77 (1,23)	4,03 (1,44)	-1,740 (0,08) <sup>g</sup>	P < U
social activity	3,59 (1,55)	3,61 (1,34)	-0,11 (0,91)	$\mathbf{P} = \mathbf{U}$
self-care	4,22 (1,42)	4,61 (1,29)	-2,72 (0,016)**	P < U
religion*	3,92 (1,47)	4,48 (1,62)	-2,81 (0,007)**	P < U
hobby	3,87 (1,54)	3,96 (1,48)	-0,52 (0,60)	$\mathbf{P} = \mathbf{U}$
political interest	3,90 (1,36)	3,72 (1,45)	1,08 (0,28)	P = U
everyday life	3,18 (1,28)	3,49 (1,30)	-2,11 (0,036)*	P < U
future	3,91 (1,31)	4,11 (1,52)	-1,19 (0,24)	P = U
total (sum of 11 items)	40,71	42,36	-1,36 (0,17)	$\mathbf{P} = \mathbf{U}$
	(8,71)	(11,30)		

Perception of changes in various spheres of life resulting from the pandemic: respondents from Poland and Ukraine

\*scales not included in COVID-19 SLCHQ (sum), <sup>g</sup>− significance threshold, \*p≤0,05, \*\*p≤0,01; \*\*\*p≤0,001.

Opinions expressed by Poles and Ukrainians about the changes in various areas of life resulting from the two-year pandemic were similar as regards many issues. Both groups reported improvement in relations with parents, no change in or deterioration of relations with friends, co-workers, as well as no change or adverse change as regards work, physical health, financial situation, social activity, hobby or interest in political issues. differences. Poles reported a significant There were also some improvement, while Ukrainians perceived deterioration in relations with children or grandchildren. Poles reported poorer mental performance, while Ukrainians indicated no changes. Ukrainians were less likely than Poles to perceive deterioration in daily functioning. Significantly greater improvement in self-care was reported by Ukrainians than by Poles. Poles admitted their interest in religion decreased whereas Ukrainians perceived a positive change in this area. Interestingly, future was perceived by Poles

in a similar way as the time before the pandemic, whereas Ukrainians saw it in a more positive way. Although no intergroup differences were found as regards the total result, it is higher in the group of Ukrainian respondents. The possible score was in the range between 11 and 77 points (with 44 points in the middle of the scale); the result acquired by the Ukrainian group was close to the middle point on the scale and suggests perception of *rather negative change or no change*. The findings show no relationship between the total score in COVID-19 SLCHQ and the variables of sex, education, family and personal COVID-19 history, nationality or the interactions of these variables. Nevertheless, it should be pointed out that respondents from Ukraine acquired higher scores (cf. Table 3).



#### Figure 1. Subjective assessment of life changes during COVID-19 pandemic: respondents from Poland and Ukraine

\*scales not included in COVID-19 SLCHQ; The answers are expressed on a 7-point Likert scale (1 = dramatically negative changes, 2 = very negative changes, 3 = rather negative changes, 4 = neither negative nor positive, 5 = rather positive changes, 6 = very positive changes, 7 = extremely positive changes).

Scores in specific items of COVID-19 SLCHQ were also examined for correlations with age, separately for each group (Spearman's rho correlation coefficients were calculated). In the group of Poles, age significantly corresponded to opinions about improved mental health ( $\rho = 0,165$ , p = 0,008), improved intellectual capacities ( $\rho = 0,155$ , p = 0,012) and to positive opinions about the future ( $\rho = 0,143$ , p = 0,021). On the other hand, older Ukrainians were more likely to see negative changes in relations with parents ( $\rho = -0,288$ , p = 0,004), friends ( $\rho = -0,240$ p = 0,012), and co-workers ( $\rho = -0,250$ , p = 0,021), and to express opinions about decrease in intellectual capacities ( $\rho = -0,200$ , p = 0,037), and in interest in politics of their own country ( $\rho = -0,267$ , p = 0,005). In summary, in the group of Polish respondents older age is conducive to a sense of positive changes in certain areas of life as a result of the pandemic, whereas in the group of Ukrainian subjects, older age seems to promote a belief that the pandemic adversely affects various areas of life.

Table 3.

		vay analysis of varia	
variables	Polish group	Ukrainian group	Effects (F, p)
	M (SD)	M (SD)	
gender			nationality x gender
-female	40,38 (8,53)	42,03 (11,47)	F = 0,06, p = 0,812
-male	41,78 (9,26)	44,12 (10,50)	gender $F = 1,46 p = 0,23$
			nationality $F = 1,90$
			p = 0,17
level of education			nationality $F = 2,27$
-lower	39,40 (9,05)	41,56 (10,88)	p = 0,13
-higher	41,36 (8,48)	42,72 (11,54)	education level $F = 1,78$
			p = 0,18
			nationality x education
			F = 0,12 p = 0,73
Covid-19			nationality x health status
-yes	41,26 (8,38)	41,38 (11,78)	F = 1,17 p = 0,279
-no	40,47 (8,85)	43,05 (10,99)	nationality $F = 1,42$
			p = 0,23
			health status $F = 0,15$
			p = 0,69
Covid-19 in relatives			nationality x health status
-yes	40,74 (9,56)	41,88 (9,27)	in relatives $F = 0,202$ ,
-no	40,66 (7,40)	42,79 (12,94)	p = 0,653
			nationality $F = 2,22$
			p = 0,14
			health status in relatives
			F = 0,141 p = 0,71

The impact of demographic and medical variables and nationality on COVID-19
SLCHO (two-way analysis of variance)

**Conclusions.** Respondents from Poland and Ukraine notice both positive and negative changes in various spheres of life resulting from the pandemic. However, they describe the past two years of the pandemic as a time of minor negative changes or time which did not change much in their lives. Despite many similarities, there were also some differences between the respondents; for instance, Ukrainians are more likely to notice positive changes related to their religion, cognitive capacities and health self-care, whereas Poles tend to see improvement in their relations with children/grandchildren and partners. Nevertheless, the overall opinion expressed by Poles with regard to the effects of the pandemic on various areas of functioning is slightly more negative (although not significantly) than the opinions formulated by Ukrainians. This result is consistent with

earlier research reports suggesting there are similarities and differences between people of various nationalities in coping with the situation of the pandemic. Notably, there is a relationship between respondents' opinions and age. Research evidence suggests that young adults, predominant in the group of respondents from Ukraine, were more at risk of developing posttraumatic stress disorder (PTSD) during the first stage of the pandemic (Lei et al., 2021). The present study did not identify effects of nationality, sex, education, as well as personal or family COVID-19 history, or interaction of these factors on the respondents' perception of changes in their lives due to the pandemic. Research conducted at the early stages of the pandemic showed a clear relationship of PTSD and such factors as sex (female) (Benatov et al., 2022; Kostruba, 2021), education (low level), personal or family history of COVID-19. Our findings reflect the dynamics of emotion- and knowledge-based assessment of the two-year period of the pandemic, including capacity for resilience, i.e., the process of adjustment, transformation, and growth. In explaining the results, it would be worthwhile to make reference to economic, political, social and cultural contexts. These factors, combined with the history of a given nation and culture, are responsible for the way trauma is defined and dealt with (Chentsova-Dutton, Maercker, 2019). Because of these factors, a pandemic does not have to be perceived as a traumatic situation, when compared to an experience of war or economic transformations. In further research focusing on perception of the consequences of the pandemic it would be worthwhile to emphasise these, frequently overlooked, broad contexts of respondents' nationality.

### References

1. Åslund, A. (2020). Responses to the COVID-19 crisis in Russia, Ukraine, and Belarus. *Eurasian Geography and Economics*, 61, 532-545, <u>https://doi.org/10.1080/15387216.2020.1778499</u>

2. Benatov, J., Ochnik, D., Rogowska, A.M., Arzenšek, A., Mars Bitenc, U. (2022). Prevalence and sociodemographic predictors of mental health in a representative sample of young adults from Germany, Israel, Poland, and Slovenia: A longitudinal study during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 19, 1334. https://doi.org/10.3390/ijerph19031334 3. Chen, Ch., Zhang, Y., Xu, A., Chen, X., Lin, J. (2020). Reconstruction of meaning in life: meaning made during the pandemic of COVID-19. *International Journal of Mental Health Promotion*. <u>https://doi.org/10.32604/IJMHP.2020.011509</u>

4. Chentsova-Dutton,Y., Maercker, A. (2019). Cultural scripts of traumatic stress: outline, illustrations, and research opportunities. *Frontiers in Psychology*, <u>https://www.frontiersin.org/article/10.3389/fpsyg.2019.02528</u>

5. Cox, C., Swets, J., Gully, B., Xiao, J., Yraguen, M. (2021). Death concerns, benefit-finding, and well-being during the COVID-19 pandemic. *Frontiers in Psychology*. <u>https://doi.org/10.3389/fpsyg.2021.648609</u>

6. Dembitskyi, S. S., Zlobina, O. G., Sydorov, M. V.-S., Mamonova, H. A. (2020). The state of psychological distress among various social groups in Ukraine during the COVID-19 pandemic. *Ukrainian Society*, 2, 73, 74-92.

7. Długosz, P. (2021). Predictors of Mental Health after the First Wave of the COVID-19 Pandemic in Poland. *Brain Sciences*, 11, 544. https://doi.org/10.3390/brainsci11050544

8. Długosz, P., Zoska, Y. V. (2020). The Impact of the Covid-19 Pandemic on the Psychosocial Condition of Students in Poland and Ukraine. *Pedagogika Społeczna*, 4 (78), 59-71.

9. Długosz, P., Kryvachuk, L. (2021). Neurotic Generation of Covid-19 in Eastern Europe. *Frontiers in Psychiatry*, 12, 654590. https://doi.org/10.3389/fpsyt.2021.654590

10. Hou, W.K., Lai, F.T., Ben-Ezra, M., Goodwin, R. (2020). Regularizing daily routines for mental health during and after the COVID-19 pandemic. *Journal of Global Health*, *10*(2). 020315. <u>https://doi.org/10.7189/jogh.10.020315</u>

11. Ipsen, C., van Veldhoven, M., Kirchner, K., Hansen, J.P. (2021). Six key advantages and disadvantages of working from home in Europe during COVID-19. *International Journal of Environmental Research and Public Health*, 18, 1826. https://doi.org/10.3390/ijerph18041826

12. Kostruba, N. (2021). Social restrictions in the Covid-19 pandemic as a traumatic experience: psycholinguistic markers. *East European Journal of Psycholinguistics*, 8(1), 28-40. https://doi.org/10.29038/eejpl.2021.8.1.kos

13. Lei, L., Zhu, H., Li, Y., Dai, T., Zhao, S., Zhang, X., Muchu, X., & Su, S., (2021). Prevalence of post-traumatic stress disorders and associated factors one month after the outbreak of the COVID-19 among the public in southwestern China: a cross-sectional study. *BMC Psychiatry*, 21, 545. <u>https://doi.org/10.1186/s12888-021-03527-1</u>

14. Lenzen, M., Li, M., Malik, A, Pomponi, F., Sun, Y-Y., Wiedmann, T., Faturay, F., Fry, J., Gallego, B., Geschke, A., Gómez-Paredes, J., Kanemoto, K.,

Kenway, S., Nansai, K., Prokopenko, M., Wakiyama, T., Wang, Y., Yousefzadehet, M. (2020). Global socio-economic losses and environmental gains from the Coronavirus pandemic. *PLoS ONE* 15(7): e0235654. https://doi.org/10.1371/journal.pone.0235654

15. Long, E., Patterson, S., Maxwell, K., Blake, C., Bosó Pérez, R., Lewis, R., McCann, M., Riddell, J., Skivington, K., Wilson-Lowe, R., Mitchell, K. (2022). COVID-19 pandemic and its impact on social relationships and health. *Journal of Epidemiology and Community Health*, 76, 128-132. <u>https://doi.org/10.1136/jech-2021-216690</u>

16. Martsenkovskyi, D., Babych, V., Martsenkovska, I., Napryeyenko, O., Napryeyenko, N., & Martsenkovsky, I. (2022). Depression, anxiety, stress and trauma-related symptoms and their association with perceived social support in medical professionals during the COVID-19 pandemic in Ukraine. *Advances in Psychiatry and Neurology/Postępy Psychiatrii i Neurologii*. https://doi.org/10.5114/ppn.2022.114657

17. Ochnik, D., Rogowska, A., Kuśnierz, C., Jakubiak, M., Schütz, A., Held, M., Arzenšek, A., Benatov, J., Berger, R., Korchagina, E., Pavlova, I., Blažková, I., Aslan, I., Çınar, O. & Cuero-Acosta, Y. (2021). Mental health prevalence and predictors among university students in nine countries during the COVID-19 pandemic: a cross-national study. *Science Reports*, 11, 18644. https://doi.org/10.1038/s41598-021-97697-3

18. O'Connor R.C., Wetherall K., Cleare S., McClelland H., Melson A.J., Niedzwiedz C.L., O'Carroll R.E., O'Connor D.B., Platt S., Scowcroft E., Watson, B., Zortea, T., Ferguson, E., Robb, K. (2021). Mental Health and Well-Being during the COVID-19 Pandemic: Longitudinal Analyses of Adults in the UK COVID-19 Mental Health & Wellbeing Study. *British Journal of Psychiatry*, 218, 326–333. https://doi.org/10.1192/bjp.2020.212

19. Robinson, E., Sutin, A., Daly, M., Jones, A. (2022). A systemic review and meta-analysis of longitudinal cohort studies comparing mental health before versus during the Covid-19 pandemic in 2020. *Journal of Affective Disorders*, 296, 567-576. <u>https://doi.org/10.1016/j.jad.2021.09.098</u>

20. Ruiz, M., Devonport, T., Chen-Wilson, Ch.-H. J., Nicholls, W., Cagas, J., Fernandez-Montalvo, J., Choi, Y., Robazza, C. (2021). Cross-cultural exploratory study of health behaviors and wellbeing during COVID-19. *Frontiers in Psychology*, 11, 3897. <u>https://doi.org/10.3389/fpsyg.2020.608216</u>

21. Saikat, S., Dhillon, J.S., Wan Ahmad, W.F., Jamaluddin, R.A. (2021). A systematic review of the benefits and challenges of mobile learning during the

COVID-19Pandemic.EducationSciences,11,459.https://doi.org/10.3390/educsci11090459

22. Singh, K., Kondal, D., Mohan, S., Jaganathan, Deepa, M., Srinivasapura Venkateshmurthy, N., Jarhyan, P., Anjana, R., Venkat Narayan, K.M., Mohan, V., Tandon, N., Ali, M., Prabhakaran, D. & Eggleston, K. (2021). Health, psychosocial, and economic impacts of the COVID-19 pandemic on people with chronic conditions mixed methods in India: а study. BMC Public Health. 21. 685. https://doi.org/10.1186/s12889-021-10708-w

23. Sozański, B., Ćwirlej-Sozańska, A., Wiśniowska-Szurlej, A., Jurek, K., Górniak, P., Górski, K., Englert-Bator, A., & Perenc, L. (2021). Psychological responses and associated factors during the initial stage of the coronavirus disease (COVID-19) epidemic among the adult population in Poland - a cross-sectional study. *BMC Public Health*, 21, 1929. <u>https://doi.org/10.1186/s12889-021-11962-8</u>

24. Szepietowska, E.M., Zawadzka, E., Filipiak, S. (2022). Symptoms of posttraumatic stress disorder and the sense of gains and losses during the Covid-19 pandemic: an international study. *International Journal of Environmental Research and Public Health*, 19, 3504. <u>https://doi.org/10.3390/ijerph19063504</u>

25. Zasiekina, L. (2021). Online cognitive-behavioral therapy of students' emotional distress during the COVID-19 pandemic. *Psychological Prospects Journal*, 38, 49–62. <u>https://doi.org/10.29038/2227-1376-2021-38-49-62</u>

26. <u>https://www.gov.pl/web/zdrowie/pierwszy-przypadek-koronawirusa-w-polsce</u>

27. https://ourworldindata.org/coronavirus/country/poland

28. https://ourworldindata.org/coronavirus/country/ukraine

Received: 01.04.2022 Accepted: 18.04.2022