Psychology. Journal of the Higher School of Economics. 2021. Vol. 18. N 4. P. 871–887.
Психология. Журнал Высшей школы экономики. 2021. Т. 18. № 4. С. 871–887.
DOI: 10.17323/1813-8918-2021-4-871-887

THE PREVALENCE OF LONELINESS AMONG UNIVERSITY STUDENTS FROM FIVE EUROPEAN COUNTRIES DURING THE COVID-19 PANDEMIC

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Распространенность переживания одиночества среди студентов университетов пяти европейских стран во время пандемии COVID-19

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The research was funded by RFBR, Krasnoyarsk Territory and Krasnoyarsk Regional Fund of Science, project N 20-413-242905.

Исследование выполнено при финансовой поддержке РФФИ, Правительства Красноярского края и Красноярского краевого фонда науки в рамках научного проекта № 20-413-242905.

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Abstract

At universities for students, the COVID-19 pandemic and the introduced anti-pandemic measures turned out to be psychotraumatic factors that increased the experience of loneliness. The purpose of the study was to investigate the prevalence of the phenomenon of loneliness among university students in five European countries, taking into account the variety of anti-COVID measures during the COVID-19 pandemic. Using the UCLA Loneliness Scale, questionnaires of 2316 students. In Russia, Poland and Ukraine a hard lockdown was introduced during the pandemic. Lithuania (in the first months) did not undertake severe restrictions, and for a long time the danger of the SARS-CoV-2 virus was not recognized in Belarus. The students in Lithuania and Belarus, 33 and 35 points. Students from Poland, Russia and Ukraine: 38, 37, 37 points, respectively. All respondents were classified according to three levels of loneliness experience. A low level (<40) was noted in 1,510 cases (65.2%), medium (40–60) — 740 people (32.0%), high (>60) experience of loneliness — 66 respondents (2.8%). Among the representatives of Lithuania and Belarus, a low level of subjective feeling of loneliness prevailed (about 70% of respondents), while in Ukraine, Russia and Poland the share of low indicators was significantly less, respectively, 65.2%, 59.8% and 57.8%. University students from five countries who participated in the study do not experience high levels of loneliness. Gradation of the prevalence of feelings of loneliness from minimum to maximum in comparison is as follows: LT — BY — RU—UA—PL. The severity of loneliness is associated with the levels of restrictions in the countries during the pandemic.

Резюме

Для студентов в университетах пандемия COVID-19 и введенные антипандемические меры оказались психотравмирующими факторами, усилившими переживание одиночества. Целью работы была сравнительная оценка распространенности феномена переживания одиночества у студентов университетов из пяти европейских стран с учетом разнообразия антиковидных стратегий во время пандемии COVID-19. При помощи шкалы одиночества UCLA проанализированы анкеты-опросники 2316 студентов из пяти европейских стран. В России, Польше и Украине во время пандемии вводился жесткий локдаун. Литва в первые месяцы не предпринимала жестких ограничений, а в Беларуси долгое время не признавалась опасность вируса SARS-CoV-2. Суммарный показатель одиночества всех опрошенных составил 36 баллов (медиана). У представителей студенчества Литвы и Беларуси он был минимальным (33 и 35 баллов). У студентов из Польши, России и Украины был достоверно выше: 38, 37, 37 баллов соответственно. Все респонденты были классифицированы с учетом трех уровней переживания одиночества. Низкий уровень (менее 40 баллов) отмечен в 1510 случаях (65,2%). Средний (40–60 баллов) — 740 человек (32,0%). Высокий (более 60) с максимальным переживанием одиночества выявлен у 66 респондентов (2,8%). У представителей Литвы и Беларуси низкий уровень субъективного ощущения одиночества превалировал (около 70% респондентов), в то время как среди представителей Украины и особенно России и Польши доля низких показателей достоверно была меньше, соответственно 65,2, 59,8 и 57,8%. Студенты университетов из пяти стран, принявшие участие в исследовании, не испытывали высокого уровня одиночества. Суммарный показатель соответствует низкому и среднему уровню. Градация распространенности переживаний одиночества от минимального до максимального в сравнении: LT — BY — RU — UA — PL. Выраженность одиночества связана с уровнем

ограничений, проводимых в странах во время пандемии.

Keywords: university students, loneliness, UCLA Loneliness Scale, pandemic, COVID-19.

Ключевые слова: студенты, одиночество, шкала одиночества UCLA, пандемия, COVID-19.

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Introduction

The COVID-19 pandemic has brought about significant changes in education around the world. Most countries have closed educational institutions for at least some time, "creating the worst global disruption to education in history" (Stolberg, 2020; Ioseliani & Anisimov, 2021). The COVID-19 pandemic has highlighted a massive challenge in the form of loneliness. Social distancing has become the norm, the biting feeling of loneliness has been an unwelcome companion to far too many Europeans. This is not a new phenomenon, yet it is now revealed as never before and has significant social, economic and health implications that deserve our attention (Baarck et al., 2021).

Loneliness is a complex, multifaceted, and dynamic phenomenon determined by many factors of an unknown disease (Loades et al., 2020; Dossey, 2020). Loneliness can permeate the entire structure of the personality and spread to the cognitive, emotional-regulatory and active-volitional spheres (Skalski et al., 2020). The social isolation recommended during the pandemic has had a detrimental effect on mental and physical health as well as negative consequences for social cohesion and trust in society (Smith & Lim, 2020). In addition to the stress caused by fear of infection and the pressure of uncertainty about the prognosis of infection, restrictions worsened overall well-being and the quality of interpersonal relationships (Polskaya & Razvaliaeva, 2020). Changes in lifestyle and social activity exacerbated the stressful situation (Saltzman et al., 2020). During and after the isolation measures were applied, an increase in the number of people feeling lonely has been observed in many countries (Banerjee & Rai, 2020; Huang et al., 2020). A report from the European Commission's Joint Research Center states that in the European Union, after the outbreak of COVID-19, the proportion of respondents who often felt lonely doubled (Banerjee & Rai, 2020). J. Baarck stated that the COVID-19 pandemic, and in particular the mobility restrictions and social distancing measures adopted to contain the spread of the virus, has made the need to tackle loneliness and social isolation even more pressing.

Young adults between the ages of 18–35 are often affected by the loneliness effect (Sinczuch, 2002), forming a high-risk group. Many researchers note that it is this demographic group that suffers most during a lockdown (Liu et al., 2020). Pre-pandemic research data also indicates a relatively high prevalence of the phenomenon among young people (Bu et al., 2020). Young people aged 15–24 years (21%) and 24–49 years (17%) feel lonely "often" or "sometimes" (Jose & Lim, 2014; Beam & Kim, 2020). A several-fold increase in the prevalence of loneliness compared to the pre-pandemic period has been noted in studies (Lee et al., 2020; Losada-Baltar et al., 2020).

All this indicates the relevance of studying the phenomenon of loneliness and the need to develop preventive measures during the COVID-19 pandemic. University students, as a high-risk group, not only experience loneliness during a pandemic, but could potentially have an even higher risk of the consequences of loneliness in the post-hoc period (Sharma, 2020; Bu et al., 2020). On the other

hand, students as a social community that quickly adapts to new conditions of life, are an interesting population for comparative research (Bertrand et al., 2021).

With the spread of the SARS-CoV-2 virus in the world, each country chooses its own path, going through a unique "natural experiment" initiated by the COVID-19 disease (Odintsova et al., 2021). In Russia, Poland, and later in Lithuania and Ukraine, like in most European countries, enhanced quarantine measures were introduced in the first wave of the pandemic to combat the spread of infection. Lockdown in Lithuania was introduced from March 16th to June 17th, 2020. It was shorter than in other countries. In Lithuania, strict quarantine was introduced on November 7, 2020. In contrast to these countries, at the beginning of the pandemic Belarus and Sweden did not adopt a similar anti-pandemic strategy. In these countries, the preservation of the previous organization of social life was demonstrated, without serious restrictions and panic moods (Baral et al., 2021). In Belarus, a regime of complete restriction of social contacts was not introduced, and the population was only informed about the need to comply with safety measures (Gubenko, 2020; Karáth, 2020). The effect of pandemic restrictions on the prevalence of loneliness can be seen by comparing this phenomenon in countries with different anti-epidemic strategies.

We rely on the term "loneliness" as used in (Baarck et al., 2021). The term "loneliness" defines three very distinctive forms of "being alone" for an individual: loneliness, social isolation, and solitude, even if the terms are sometimes used interchangeably in everyday language. In the literature, loneliness has a strong subjective nature. It is the perception of a discrepancy between a person's desired and actual network of relationships. It is lived as a deeply negative experience. It is not only about having too few social contacts per se, but also about the perception that these relationships are not satisfying enough. In other words, loneliness does not mean being alone, but feeling alone. In this respect, loneliness is different from social isolation, which has an objective connotation defined by an absence of relationships with other people and/or a very small number of meaningful ties.

Solitude describes the act of being alone voluntarily, which once again involves the objective condition of being away from others but also the possibility of pleasant and positive feelings about this situation.

Based on the definitions, we used the method of assessment — the Loneliness Scale of the University of California, Los Angeles, UCLA (Russell, 1996; Yildirim & Kocabiyik, 2010) to determine all three forms of the phenomenon of loneliness.

Current Study

Research hypothesis: the prevalence of the levels of loneliness among university students has its own characteristics depending on the effect of anti-pandemic measures taken in each individual country.

Purpose of the work: to investigate the prevalence of the phenomenon of loneliness among university students in five European countries, taking into account the variety of anti-COVID measures during the pandemic.

Participants and Procedure

Participants

The study was carried out in September-October 2020 on the basis of universities in five European countries (2316 non-technical students were interviewed). In Belarus (Grodno, Vitebsk, Minsk) — 822 students, Russia (Moscow, Moscow region, Arkhangelsk, Krasnoyarsk) — 523 students, Poland (Bialystok, Suwalki, Byala Podlaska) — 632 students, Lithuania (Klaipeda, Kaunas) — 223 students, Ukraine (Ternopil) — 116 students.

Measures

The research was conducted on the Google Forms platform https://docs.google.com/forms/d/14vY2rAAjW_ENyr6dqGTszks9KgYWi1dalVmm7DyiyxQ/edit. The created electronic file of questionnaires made it possible to form a database and perform statistical analysis. Tracking and analyzing the experience of loneliness was carried out using a generally recognized and widely used instrument, the Loneliness Scale of the University of California, Los Angeles, UCLA (Russell, 1996). This one-dimensional scaling method is a summary scores selected by developers based on a series of methodological experiments, as well as a correlation with a self-rating index for loneliness with a validation check (Russell et al., 1980). The third version of the UCLA Loneliness Scale is based on shared experience and measures the negative aspects of loneliness. There are 11 negative ("alone") and 9 positive ("not alone") statements used (Russell, 1996). For answers, a 4-point ordinal scale of Likert grades (Likert) is proposed. The result is in the form of the sum of points, taking into account the fact that in the part of the questionnaire statements the answer option "I often feel this way" is coded as "4", and "I never feel this way" as "1", and for Questions 1, 4–6, 9, 10, 15, 16, 19, 20, on the contrary, "I often feel this way" is "1", and "I never feel this way" is "4" (Russell, 1996; Puzanova, 2009).

The overall result is estimated in the range of 20–80 points, and it can be interpreted as the severity of the state of forced isolation, desire or even the need for loneliness, as well as diagnose a construct with factors: lack of unity with the people around; lack of interpersonal contacts, isolation, alienation, isolation; dissatisfaction with the quality of relationships with others.

The Russian-language adaptation of this technique was performed earlier (Ishmuhametov, 2006). The obtained psychometric indicators correspond to the original English version. The Polish-language version also confirmed compliance with the original English-language version (Kwiatkowska et al., 2018). In addition, the results of the methods of checking for validity and correlations with the index of self-assignment to the category of loneliness were used. Cronbach's alpha of statements was 0.89, which confirmed the high internal consistency of the statements of the questionnaire (Puzanova, 2009).

Procedure

The data collection tools used in this research study were applied to volunteer participants. All study participants were informed about the purpose and objectives of the study, methodology, and anonymous and confidential nature. After the study was approved by the Ethics Committee of Yanka Kupala State University of Grodno, participants participated through an online questionnaire. Prior to participating, the researchers obtained consent from the participants. Access to the electronic questionnaire was provided only in the case of expressing consent to participate in the study.

Data analysis

The statistical software package Statistica 13 PL (StatSoft, USA) was used for statistical processing and for search for significant dependencies. Data processing was carried out with an assessment of the correspondence of the obtained values to the normal distribution of the variation series using the Shapiro-Vilk W-test. The final quantitative indicators for all scales and the sum had a distribution that differed from the norm, therefore, when processing and interpreting the results, nonparametric indicators were used. As a measure of the central tendency, the median, the minimum and maximum values, and the interquartile range of the IQR (the difference in the values of the upper 75th and lower 25th quartiles) were indicated. Additionally, the generally accepted indicators were used: the arithmetic mean (M) together with the standard deviation (± SD). To assess the significance of differences between the two groups of respondents, the Mann—Whitney U-test was used (differences were significant at $p < 0.05$). As a nonparametric alternative to one-dimensional (intergroup) analysis of variance. The Kruskal—Wallis test was used to compare the five groups with correction for multiple Bonferroni comparisons (Perneger, 1998). Spearman's rank correlation method is applied to determine the strength and direction of correlations between indicators.

Results

The age of the students in the groups was 21.0 ± 1.54 years. Distribution of respondents by gender: male, 24.0%, female, 76.0%. The relationship by age and gender is maintained in all five countries represented. The results of processing the data of the questionnaires with the determination of the total level of experience of loneliness according to the UCLA Scale are presented in Table 1.

The diagram (Figure 1) visualizes the final indicators of calculating the total level of loneliness of student youth in the country.

According to the data obtained using the UCLA Scale, respondents who showed three levels of loneliness experience were singled out in each of the groups. A low level (total score less than 40 points) was noted in 1,510 cases (65.2%). The medium level (40–60 points) was observed in 740 people (32.0%). A high level

Table 1

Comparative Assessment of the Experience of Loneliness (by Representatives of University Students from Five European Countries)

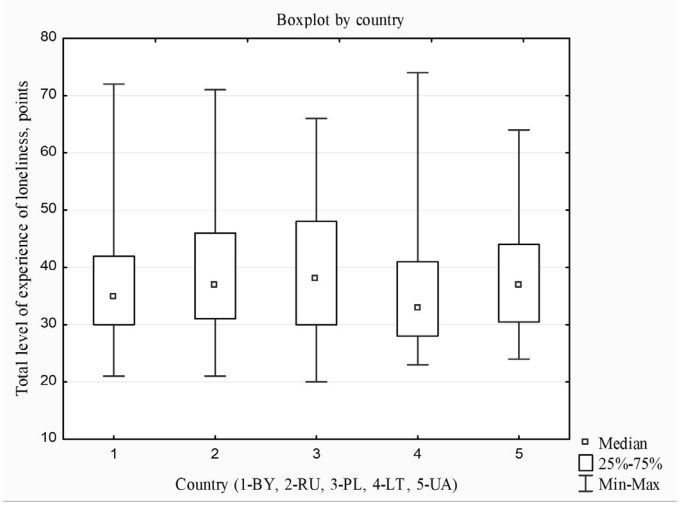
Group of respondents	Median	Minimum–Maximum	IQR	M ± SD	Mann–Whitney tests (Z) for 2 samples and Kruskal–Wallis tests (H) for 5 samples*
BY (N = 822)	35.0	21.0–72.0	30.0–42.0	36.7 ± 8.75	$Z = -4.5$; $P_{BY\text{-}RU} < .001$
RU (N = 523)	37.0	21.0–71.0	31.0–46.0	39.2 ± 9.71	$Z = -3.9$; $P_{BY\text{-}PL} < .001$
PL (N = 632)	38.0	20.0–66.0	30.0–48.0	39.2 ± 10.8	$Z = 4.8$; $P_{PL\text{-}LT} < .001$
LT (N = 223)	33.0	23.0–74.0	28.0–41.0	36.2 ± 8.69	$Z = 2.6$; $P_{BY\text{-}LT} < .01$
					$Z = 5.4$; $P_{RU\text{-}LT} < .001$
UA (N =116)	37.0	24.0–64.0	30.5–44.0	38.5 ± 9.44	$Z = -3.1$; $P_{LT\text{-}UA} < .01$
Total (N=2316)	36.0	20.0–74.0	31.0-45.0	37.9 ± 9.68	$H = 45.0$; $P_{5\ country} < .001$

Note. Hereinafter, the designation of the countries where the study was carried out: BY — Belarus, RU — Russia, PL — Poland, LT — Lithuania, UA — Ukraine.

* Bonferroni correction for multiple comparisons is applied.

Figure 1

The Severity of the Total Indicator of the Experience of Loneliness in the Five Studied Groups



(more than 60 points) with the maximum feeling of loneliness was revealed in 66 respondents (2.8%) (Table 2).

Thus, the first group includes students who are not inclined to experience loneliness. The second group was formed of respondents occupying an intermediate

Table 2

Ranges of the Levels of Experience of Loneliness among Respondents in the Studied Groups (Number, Percentage, 95% CI – Confidence Interval)

Group	Level of experience of loneliness			Pearson χ^2 test
	Low (< 40 points)	*Medium (40–60 points)*	*High (> 60 points)*	
BY (N = 822)	592 (72.0) (69.0–75.1)	216 (26.3) (23.3–29.3)	14 (1.7) (0.8–2.6)	$\chi^2 = 21.6$ $P_{BY\text{-}RU} < .001$
RU (N = 523)	313 (59.8) (55.7–61.1)	196 (37.5) (33.3–41.6)	14 (2.7) (1.3–4.1)	$\chi^2 = 16.1$ $P_{RU\text{-}LT} < .001$
PL (N = 632)	365 (57.8) (53.9–61.6)	235 (37.2) (33.4–41.0)	32 (5.1) (3.4–6.8)	$\chi^2 = 37.5$ $P_{BY\text{-}PL} < .001$
LT (N = 223)	167 (74.9) (69.2–8.36)	54 (24.2) (18.6–29.8)	2 (0.9) (0.3–2.1)	$\chi^2 = 23.2$ $P_{PL\text{-}LT} < .001$
UA (N = 116)	73 (62.9) (54.1–71.7)	39 (33.6) (25.0–42.2)	4 (3.4) (0.1–6.8)	$\chi^2 = 6.8$ $P_{LT\text{-}UA} < .05$
Total (N = 2316)	1510 (65.2) (63.3–67.1)	740 (32.0) (30.1–33.9)	66 (2.8) (2.2–3.5)	$\chi^2 = 57.6$ $P_{5\ countries} < .001$

position, whose answers are characterized by uncertainty. The most common answer in this group is "sometimes". The third group with a high level of experience of loneliness is the smallest. The ranges of the levels of experience of loneliness among the respondents in the studied groups by country are presented in Table 3. The results obtained on the basis of basic statistics revealed a set of correlations between the indicators of respondents in the data set of the statements of the questionnaire, which are reduced to 17 questions out of 20, describing the division into groups for five countries. The Table shows data on all questions of the questionnaire, which can be considered as criteria that reliably distinguish between the studied groups according to the Kruskal–Wallis criterion (adjusted for multiple Bonferroni comparisons).

The total indicator of the experience of loneliness does not correlate with the gender and age of the study participants, although a tendency and a weak connection were noted according to most of the criteria of the UCLA Scale (Spearman's rank correlation coefficient for Questions 2, 6–8, 10, 11, 13, 14, 16, 17, 19, 20 from $r = -0.04$ to $r = 0.11$, $p < 0.05$). For Questions 6–8, 10, 13, 16, 19 and 20, the degree of expressiveness of answers were higher for male participants, and for answers to Questions 2, 11, 14, 17, for female participants.

Discussion

In scientific research, loneliness is often interpreted as a pathological painful condition. Preference is given to studying this phenomenon at certain age periods (Lin & Chiao, 2020; Dumont et al., 1990) or in selected socio-demographic groups (Pitman et al., 2018). It is believed that a fairly large number of young people feel

Table 3

Distinctive Features of the Criteria for Loneliness According to the UCLA Scale, Taking into Account the Country of Residence

№	Contents of the question (Russell et al., 1980; Hughes et al., 2004)	Country of survey (median; IQR; M ± SD)					Total	Kruskal–Wallis test** H, P
		BY	*RU*	*PL*	*LT*	*UA*		
1*	I feel in tune with the people around me	1.0; 1–2; 1.3 ± 0.58	1.0; 1–2; 1.4 ± 0.65	1.0; 1–2; 1.6 ± 0.75	1.0; 1–1; 1.3 ± 0.5	1.0; 1–1; 1.3 ± 0.6	1.0; 1–2; 1.4 ± 0.7	95.0; < .001
2	I lack companionship	3.0; 2–3; 2.9 ± 0.83	3.0; 2–3; 2.9 ± 0.82	2.0; 2–3; 2.3 ± 0.84	3.0; 3–4; 3.1 ± 0.7	3.0; 2–4; 2.9 ± 0.9	3.0; 2–3; 2.8 ± 0.9	220.9; < .001
3	There is no one I can turn to	2.0; 1–2; 1.8 ± 0.89	2.0; 1–2; 1.9 ± 0.92	2.0; 1–2; 1.8 ± 0.89	1.0; 1–2; 1.9 ± 0.9	1.5; 1–2; 1.8 ± 0.9	2.0; 1–2; 1.8 ± 0.9	> .05
4*	I do not feel alone	2.0; 1–3; 2.4 ± 1.15	2.0; 1–3; 2.2 ± 1.03	2.0; 2–3; 2.4 ± 0.99	2.0; 2–3; 1.9 ± 0.9	2.0; 2–3; 2.3 ± 1.2	2.0; 2–3; 2.3 ± 1.1	43.4; < .001
5*	I feel part of a group of friends	1,0; 1–2; 1,5 ± 0,74	1,0; 1–2; 1,7 ± 0,85	2,0; 1–2; 1,7 ± 0,88	1,0; 1–2; 1,6 ± 0,8	1,0; 1–2; 1,6 ± 0,9	1,0; 1–2; 1,6 ± 0,8	29,5; < .001
6*	I have a lot in common with the people around me	1,0; 1–2; 1.6 ± 0.74	2.0; 1–2; 1.8 ± 0.80	2.0; 1–2; 1.8 ± 0.78	2.0; 1–2; 1.8 ± 0.7	1.5; 1–2; 1.7 ± 0.8	2.0; 1–2; 1.7 ± 0.8	19.4; < .001
7	I am no longer close to anyone	1.0; 1–2; 1.7 ± 0.86	1.0; 1–2; 1.7 ± 0.96	1.0; 1–2; 1.7 ± 0.96	1.0; 1–2; 1.7 ± 0.8	1.0; 1–2; 1.7 ± 0.9	1.0; 1–2; 1.7 ± 0.9	> .05
8	My interests and ideas are not shared by those around me	2,0; 2–3; 2,2 ± 0,74	2,0; 2–3; 2,3 ± 0,87	2,0; 2–3; 2,4 ± 0,96	2,0; 2–3; 2,5 ± 0,8	2,0; 2–3; 2,4 ± 0,9	2,0; 2–3; 2,3 ± 0,9	23,6; <.001
9*	I am an outgoing person	1.0; 1–2; 1.5 ± 0.70	2.0; 1–2; 1.8 ± 0.87	2.0; 1–2; 1.7 ± 0.78	1.0; 1–2; 1.6 ± 0.7	1.0; 1–2; 1.6 ± 0.9	1.0; 1–2; 1.6 ± 0.8	62.6; < .001
10*	There are people I feel close to	1.0; 1–2; 1.3 ± 0.61	1.0; 1–2; 1.4 ± 0.63	1.0; 1–2; 1.4 ± 0.65	1.0; 1–1; 1.2 ± 0.5	1.0; 1–1; 1.3 ± 0.6	1.0; 1–2; 1.3 ± 0.6	> .05
11	I feel left out	1.0; 1–2; 1.7 ± 0.87	2.0; 1–3; 1.9 ± 0.89	2.0; 1–3; 2.0 ± 0.95	1.0; 1–2; 1.6 ± 0.7	1.0; 1–2; 1.8 ± 0.8	1.0; 1–2; 1.8 ± 0.9	68.8; < .001
12	My social relationships are superficial	2.0; 2–3; 2.3 ± 0.88	3.0; 2–3; 2.6 ± 0.92	2.0; 2–3; 2.4 ± 0.89	2.0; 2–3; 2.2 ± 0.8	2.0; 2–3; 2.7 ± 0.9	2.0; 2–3; 2.4 ± 0.9	47.4; < .001
13	No one really knows me well	3.0; 2–3; 2.6 ± 0.97	3.0; 2–3; 2.6 ± 1.03	2.0; 2–3; 2.5 ± 1.03	2.0; 1–3; 2.1 ± 0.9	3.0; 2–3; 2.7 ± 1.0	3.0; 2–3; 2.5 ± 1.0	53.8; < .001
14	I feel isolated from others	2.0; 1–2; 1.8 ± 0.89	2.0; 1–3; 2.1 ± 0.98	2.0; 1–3; 2.1 ± 1.0	1.0; 1–2; 1.6 ± 0.8	2.0; 1–3; 2.0 ± 0.9	2.0; 1–3; 1.9 ± 0.9	89.6; < .001
15*	I can find companionship when I want it	2.0; 1–2; 1.9 ± 0.86	2.0; 1–3; 1.9 ± 0.86	2.0; 1–3; 1.9 ± 0.86	2.0; 1–2; 1.9 ± 0.9	2.0; 1–3; 1.9 ± 0.9	2.0; 1–3; 1.9 ± 0.8	23.0; < .001
16*	There are people who really understand me	1.0; 1–2; 1.6 ± 0.75	1.0; 1–2; 1.6 ± 0.75	2.0; 1–2; 1.8 ± 0.83	1.0; 1–2; 1.5 ± 0.7	1.0; 1–2; 1.7 ± 0.9	1.0; 1–2; 1.6 ± 0.8	33.3; < .001
17	I am unhappy being so withdrawn	1.0; 1–2; 1.8 ± 0.93	2.0; 1–3; 2.0 ± 1.0	2.0; 1–3; 2.1 ± 1.03	1.0; 1–2; 1.6 ± 0.9	1.0; 1–3; 1.8 ± 0.9	2.0; 1–3; 1.9 ± 0.9	73.3; < .001
18	People are around me but not with me	2.0; 2–3; 2.3 ± 0.92	2.0; 2–3; 2.5 ± 0.95	2.0; 2–3; 2.4 ± 0.98	2.0; 1–3; 2.0 ± 0.9	2.0; 2–3; 2.3 ± 0.9	2.0; 2–3; 2.3 ± 0.9	40.3; < .001
19*	There are people I can talk to	1.0; 1–1; 1.3 ± 0.60	1.0; 1–2; 1.4 ± 0.64	1.0; 1–2; 1.5 ± 0.74	1.0; 1–2; 1.3 ± 0.7	1.0; 1–2; 1.4 ± 0.8	1.0; 1–2; 1.4 ± 0.7	50.6; < .001
20*	There are people I can turn to	1.0; 1–2; 1.4 ± 0.65	1.0; 1–2; 1.4 ± 0.68	1.0; 1–2; 1.6 ± 0.78	1.0; 1–2; 1.3 ± 0.6	1.0; 1–2; 1.4 ± 0.7	1.0; 1–2; 1.4 ± 0.7	42.5; < .001

Note. The total score is the sum of all 20 items.

* Item should be reversed (i.e., 1 = 4, 2 = 3, 3 = 2, 4 = 1) before scoring.

** Bonferroni correction for multiple comparisons is applied.

lonely, so they seek recognition and acceptance in a peer group. After the age of 40, the manifestations of loneliness decrease, but they again increase in the elderly. An estimated 15 to 30 percent of the population feels lonely at all times (Louise et al., 2018). According to our data, the prevalence of the experience of loneliness was less than results presented in the literature. These discrepancies, possibly, are associated with adaptation to the changed conditions of life and study of student youth. University students differ from other strata of the population in their activity, cheerfulness, and desire and need for communication. This is confirmed by studies conducted in the first months of the quarantine, when the COVID-19 pandemic was news, uncertainty, fear, alarm, especially among the young and elderly population (Burki, 2020), and consistent with results reported in the literature (Baarck et al., 2021). Communication restrictions during anti-pandemic measures alienate people from potential new social contacts. A study by American scientists (Luchetti et al., 2020) examined the change in the levels of loneliness in response to social restriction measures taken to combat the spread of coronavirus among 1,545 American adults. The assessment was carried out three times during the spring-summer of 2020. Contrary to expectations, it was concluded that there were minor changes in the levels of loneliness.

The respondents felt an increase in support from their inner circle. In our study, the severity of the respondents' loneliness corresponded to the low and medium levels of the severity of this state. Young adults tend to have a tendency to communicate with peers and to feel part of a group where social interaction skills are developed and tested; the ability to obey collective discipline; the ability to gain authority and occupy the desired status (Nowakowska, 2020). The restrictive measures caused by the COVID-19 pandemic, in our opinion, are a factor aggravating and provoking the levels of experience of loneliness, especially social loneliness. It should be borne in mind that young people often have not yet left their parental families and severe restrictive measures can exacerbate existing intra-family conflicts. Restricted live communication and attempts to compensate for it in a virtual environment, according to some authors, do not facilitate the experience of loneliness, but only exacerbate it (Samal & Stvolygin, 2020), which is indirectly confirmed by the results of our study.

The current situation and various strategies to counteract the spread of the phenomenon were an important trigger for the study of the problem of loneliness in student youth. Research findings over the past two years indicate a significant impact of the pandemic on emotional well-being, and an increase in anxiety, depression and feelings of loneliness among the younger generation. In a study loneliness is considered "... as a kind of social situation that generates a certain emotional state, the depth of which depends on the degree of isolation of a person from society..." (Bakaldin, 2008). Our research showed that the prevalence of loneliness among university students from five European countries during the COVID-19 pandemic was directly related to various anti-epidemic approaches proposed in these countries. Isolation of students in the face of the pandemic has limited the physical and spiritual needs of young people. According to the observations of authors (Elmer et al., 2020), a long-term lack of the opportunity to communicate

contributed to the development of mental disorders, anxiety and depression, and feelings of loneliness.

We assume that the young people who participated in the study had individually formed levels of experience of loneliness, and the COVID-19 pandemic and the anti-epidemic measures taken, provoked a kind of maladjustment and a stressful situation, when a person met with experiences that, in strength and duration, surpassed their psychological regulatory possibilities.

The applied method for assessing the subjective feeling of loneliness according to the UCLA Scale made it possible to compare the prevalence of the phenomenon during the period of various quarantine restrictions. Our data states that a high level (more than 60 points on the UCLA Scale) with the maximum feeling of loneliness was found in 66 respondents (2.8%). The main differences depending on the severity of the anti-epidemic measures taken are associated with the prevalence of a low level of feelings of loneliness. The softer the restrictions were (Belarus, Lithuania in the first months of the pandemic), the larger this group was. Respondents with medium and especially high levels of experience of loneliness, as one would expect, were significantly more frequent in countries with a severe lockdown. It was found that young adults from all countries represented generally showed medium levels of experience of loneliness. Among those surveyed in Belarus, the smallest group of young people with a high level of experience of loneliness (1.7%) was noted. The main criteria were "lack of friendly communication", "lack of like-minded people", "not feeling part of a group", and "lack of opportunity to open up" (Questions 1, 2, 5, 13). Recommendations on the organization of the learning process in educational institutions in the presence of COVID-19 infection in the country were mainly aimed at ensuring social distance. If necessary, the educational process of students was supplemented by the use of information and communication technologies. Isolation measures were applied mainly to patients and persons from contact of the first level. Young people with low levels of experience of loneliness in the group of students from Belarus accounted for 72%.

Students of Russian universities in 2.7% formed a group with high levels of experience of loneliness. The main distinguishing criteria were "lack of companionship", "lack of like-minded people", "lack of opportunity to open up", "lack of deep social connections", "lack of people to turn to" (Questions 2, 3, 12, 13, 20). In The period from March 30 to May 12, 2020, was declared as days off in Russia, and in the future, training was mainly conducted remotely. The group of young people with low levels of experience of loneliness was 59.8%.

Among students in Poland, there were the maximum number (5.1%) of students with high levels of experience of loneliness. Among the respondents with high levels of experience of loneliness, the leading criteria were "the absence of people for whom I have deep feelings", "the absence of people with whom I can talk", and "lack of people to turn to" (10, 19, 20). The country announced several stages of a tough national quarantine. Out of the total number students from Polish surveyed, 57.8% of the respondents presented low levels of experience of loneliness.

In the group of Lithuanian respondents, 0.9% of persons with high levels of experience of loneliness were identified and 74.9% with a minimum level. The main

distinguishing criteria were "lack of companionship", "lack of people for whom I have deep feelings", "lack of truly understanding people", "lack of people to turn to" (2, 10, 16, 20). Restrictive measures (shorter than in other countries) were applied in the country since the beginning of the pandemic. The following strict quarantine has been introduced since November 2020.

Among the students of Ukraine, the group with high levels of feelings of loneliness was 3.4%, and with low levels, 62.9%. The main distinguishing criteria were "a feeling of being out of tune with the people around them", "lack of friendly communication", "not feeling part of a group", "a difficult experience of distance from people", "the absence of people for whom I have deep feelings", "lack of people to whom I have deep feelings", "lack of truly understanding people", "lack of people with whom I can talk", "lack of people to turn to" (Questions 1, 2, 5, 9, 10, 16, 19, 20). The country has repeatedly introduced quarantine.

Constraints of a study

Limitations of the study that should be taken into account when extrapolating the results obtained, are as follows. Firstly, a study conducted in the form of an online survey with instructions on exploring the characteristics of behavior during the period of self-isolation could attract the most concerned respondents acutely experiencing the pandemic; secondly, most of the research participants are female; third, the study used a limited list of anti-pandemic measures specific to five countries, while in practice there may be more. However, this is one of the studies that have tried to examine the experience of loneliness in a large group of students in five European countries, focusing on various strategies to counter the spread of COVID-19.

Conclusions

University students from five countries who participated in the study do not experience high levels of loneliness. The prevalence of loneliness is less than the results reported in previous studies. The levels of experience of loneliness correspond to the average, and the total indicator on the UCLA Scale can be characterized as neutral. The share of respondents with high levels of experience of loneliness did not exceed 3.0%. The prevalence of the experience of loneliness revealed a gradation in terms of the total indicator (from minimum to maximum): min LT – BY – RU – UA – PL max. In Lithuania and Belarus, where a hard lockdown was not introduced in the first wave of the pandemic, low levels of feelings of loneliness prevailed, while in Ukraine, Russia and Poland the share of low levels was significantly less. It is reasonable to assume that the severity of loneliness is associated with anti-epidemic measures that have been taken during the pandemic of COVID-19 infection. Therefore, the number of respondents with medium and high levels of experience of loneliness was more common in countries with "hard" isolation. The general ideas of young people about the causes of loneliness (the cognitive level of perception of loneliness), in most cases, are explained by the problems of young

people in the communicative sphere (difficulties in communicating with friends, changes in the usual way of life) and personal characteristics (isolation). The results of the study at the cognitive level are related to the country of residence and, accordingly, to the severity of anti-pandemic measures in each individual country.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

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