Review

Factors influencing mental health among American youth in the time of the Covid-19 pandemic

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A B S T R A C T

Objective: The article aims to show the impact of the Covid-19 pandemic on mental health of American youth. It also aims to identify factors that have an impact on the mental health maintenance of young Americans. The conducted analyses are an attempt at explaining the influence of high psycho-social stress on the mental health of young people.
Methods: Secondary data from representative research conducted among the inhabitants of the United States of America on the sample of 10,139 respondents has been used in the analysis. The data is derived from the Pew Research Center, American Trends Panel.
Results: The data analysis indicates that among all the age categories the highest levels of mental discomfort have been observed among the youngest Americans aged 18–29. The majority of respondents experienced anxiety and depression. The results of analyses of the youngest respondents (sample $n = 1083$) have shown that there are a few factors which have impact on mental health of the young generation. Males, people living in relationships, practising religion more often, having a better financial situation, conservative beliefs and being devoid of citizenship had a better mental condition. Owned social, economic and cultural resources protect young Americans against the Covid-19 pandemic.
Conclusions: The conducted research confirms the hypothesis that younger generations struggle hard to cope with the Covid-19 pandemic and related difficulties. Due to the conducted analyses, the variables responsible for the deterioration of mental health in younger generations may be indicated.

(See Tables 1–4.)

The coronavirus pandemic has led to a global trauma (Demertzis & Eyerman, 2020). Its symptoms are observed almost all over the world. Numerous research indicates that as a result of the threat to life and health, being kept on quarantine and deprivation of needs, the deterioration of mental condition of inhabitants of many countries took place (Gerhold, 2020; Hyland et al., 2020; Levkovich & Shinan-Altman, 2020; Mazza et al., 2020; J. Qiu et al., 2020a, 2020b; Shevlin et al., 2020).

Mainly elderly people are at risk of death or health complications in case of contracting coronavirus (Ruan, Yang, Wang, Jiang, & Song, 2020). Therefore, it should be expected that together with the increase of age, the psychological stress in the situation of a threat of illness or death will increase as well. Seniors are expected to experience anxiety and depression during lockdown more often and their mental health should deteriorate - this could be indicated by a logical analysis of the phenomenon. Together with the increase of the level of threat of the epidemic, the levels of stress among individuals should increase as well. Young people are less susceptible to dying as a result of becoming

infected. In accordance with this model, psychosocial effects of the pandemic among older age groups should be more severe rather than in the case of youth, who are more flexible and open to changes.

The above hypothesis is partially confirmed by research. The results of research indicate that people between 18 and 30 years of age and people over 60 had the worst mental health indicators (J. Qiu, Shen, Zhao, Wang, et al., 2020a, 2020b). On the other hand, more research proves that youth have been affected by the Covid-19 pandemic the most. A review of survey research shows that the lower the age, the higher the anxiety, depression and indicators of psychosomatic disorders. Such a situation is observed in Italy (Mazza et al., 2020), Spain (Gómez-Salgado, Andrés-Villas, Domínguez-Salas, Díaz-Milanés, & Ruiz-Frutos, 2020), Portugal (Branquinho, Kelly, Arevalo, Santos, & Gaspar de Matos, 2020), Wales (Gray et al., 2020), Great Britain (Hyland et al., 2020), Canada (*Mental health during COVID-19 outbreak. Wave 1*, 2020) and many other countries.

Therefore, the hypothesis that the stress related to the pandemic is experienced the most by youth should be put forward. The article at

Table 1
Characteristics of the researched sample.

Sex % (n)	Female	58.7 (639)
	Male	41.3 (450)
Education level % (n)	College graduate+	50.3 (548)
	Some College	32.8 (357)
	H.S. graduate or less	16.9 (182)
Region % (n)	Northeast	15.8 (172)
	Midwest	20.4 (222)
	South	40.8 (441)
	West	23.4 (255)
Religious practices % (n)	More than once a week	5.1 (56)
	Once a week	11.7 (128)
	Once or twice a month	8.4 (92)
	A few times a year	17 (185)
	Seldom	22.5(245)
	Never	35.3 (382)
Race-Ethnicity% (n)	White non-Hispanic	49.7 (542)
	Black non-Hispanic	7.1 (77)
	Hispanic	33.7 (361)
	Other	9.5 (105)
Marital status % (n)	Married	22.7 (247)
	Living with a partner	17.3 (189)
	Divorced	1.3 (14)
	Separated	0.8 (9)
	Widowed	0.3 (3)
	Never been married	57.6 (628)
Family income recoded % (n)	$75.000+	28.6 (290)
	$30–$74.999	40.4 (438)
	<$30.000	31 (327)

Table 2
Results from univariate ANOVA for the categorical age.

Age	n	M	SD
18–29	1083	12.53	3.79
30–49	3187	11.72	3.74
50–64	3062	11.00	3.65
65+	2629	10.10	3.09

Table 3
Analysis of responses for the mental health scale in the age group 18–29 (in %, n).

	Most or all of the time (5–7 days)	Occasionally or a moderate amount of time (3–4 days)	Some or a little of the time (1–2 days)	Rarely or none of the time (less than 1 day)
Felt nervous, anxious, or on edge?	16.4 (179)	27.4 (298)	34.6 (377)	21.6 (235)
Felt depressed	(10,4) 113	18.9 (206)	31.1 (338)	39.6 (431)
Felt lonely	10.8 (118)	20.7 (225)	29.7 (323)	38.8 (422)
Felt hopeful about the future?	15.1(164)	33 (359)	36.7 (399)	15.2 (165)
Had trouble sleeping	18.5 (202)	19.7 (214)	30.6 (333)	31.2 (330)
Felt physical reactions, such as sweating	1.7 (18)	6.3 (68)	16.9 (184)	75.2 (818)

hand attempts to verify whether research conducted on representative samples among the American society confirm the hypothesis that the Covid-19 pandemic struck the mental condition of the American youth the most. In case of the confirmation of the above hypothesis, mental health of the young Americans should be subject to a more detailed study. The conducted analyses may also allow for determining the factors which have impact on the well-being of American youth.

Table 4
Distribution of average values on mental health scale for youth aged 18–29 in the categories of demographic and social variables.

		n	M	SD	
Ideology					F value =14, 99 P value =0,000 Eta² = 0,065
	Very conservative	41	11.90	3.84	
	Conservative	146	10.92	3.44	
	Moderate	391	12.03	3.51	
	Liberal	299	13.19	3.84	
	Very liberal	188	13.97	3.76	
Family income	$75.000+	289	11.96	3.40	F value =5,84 P value =0,001 Eta² = 0,016
	$30–$74.999	433	12.39	3.72	
	<$30.000	326	13.17	4.05	
Sex	Male	447	11.75	3.65	F value =16,96 P value =0,000 Eta² = 0,030
	Female	635	13.08	3.79	
Citizenship	Yes	991	12.66	3.81	F value =7,01 P value = 0,001 Eta² = 0,013
	No	91	11.19	3.22	
Marital status	Married	244	11.21	3.43	F value =8,15 P value =0,000 Eta² = 0,037
	Living with a partner	189	12.97	3.75	
	Divorced	14	13.50	3.03	
	Separated	9	13.33	2.17	
	Widowed	3	14.66	1.52	
	Never been married	624	12.87	3.86	
Religious service attendance	More than once a week	55	10.07	3.43	F value =6,82 P value =0,000 Eta² = 0,037
	Once a week	127	11.66	3.50	
	Once or twice a month	91	12.23	3.58	
	A few times a year	184	12.94	3.75	
	Seldom	243	12.53	3.71	
	Never	381	13.05	3.87	

1. Methods

In order to verify this hypothesis, the analysis of secondary data has been conducted. The data for this study comes from the Pew Research Center's American Trends Panel (ATP). The American Trends Panel (ATP) is a national, probability-based online panel of adults living in households in the United States. On behalf of the Pew Research Center, Ipsos Public Affairs ("Ipsos") conducted the "Wave 66" survey of the panel from April 20, 2020 to April 26, 2020. In total, 10,139 ATP members (both English- and Spanish-speaking survey-takers) completed the Wave 66 survey. Survey weights were provided for the total responding sample. The margin of sampling error for the weighted estimates is based on the full sample, i.e. it is ±1.5 percentage points (Methodology *Methodology report,* 2020).

2. Participants

The youngest age category 18–29, which constitutes 10,8% (1090) respondents from the whole research sample was selected for the study. In the youngest age category 41.3% were males and 58.7% were females. 50.3% of respondents have college education, 32.8% high school education and 16.9% have less than high school education. 15.8% come from the Northeast, 20.4% from the Midwest, 40.8% from the South and 23.4% from the West. 16.8% of respondents attend religious services once a week or more often, 8.4% once or twice a month, 17% a few times a year, 22.5% seldom and 35.3% never. In the researched sample there are 49.7% White non-Hispanic, 7.1% Black non-Hispanic, 33.7% Hispanic and 9.5% from a different ethnic group. Among the respondents, 22.7% are married, 17.3% live with a partner, 1.3% are divorced, 0.8% are separated and 0.3% are widowed. There are 57.6% of youth who live on their own. In the researched sample of youth 31% have the income of

$30.000 or less, 40.4% have the average income of $30.000–$74,999, whereas 28.6% have the high income of $75,000+.

The characteristics of the research sample indicate that the analysed group is diverse and reflects well the specificity of the contemporary generation of American youth called the Generation Z. They are well-educated and varied in terms of ethnicity. They are "digital natives", who spend a lot of time on the Internet and use digital devices in their social and educational activities (Parker & Igielnik, 2020).

3. Mental health measurement

The mental health measurement scale consists of 6 items which are derived from the following sources:

1. Have you felt nervous, anxious, or on edge? [Source: Adapted from the GAD-7]
2. Have you felt depressed? [Source: Adapted from the CES—D]
3. Have you felt lonely? [Source: Adapted from the CES—D]
4. Have you felt hopeful about the future? [Source: Adapted from the CES—D]
5. Have you had trouble sleeping? [Source: Adapted from the CES—D]
6. Have you had physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart, when thinking about your experience? [Source: Adapted from the Impact to Event Scale - Revised]

Response options for items 1–5 are: Rarely or none of the time (less than 1 day), Some or a little of the time (1–2 days); Occasionally or a moderate amount of time (3–4 days); Most or all of the time (5–7 days).

4. Results

Before presenting the results of research, the course of the pandemic during the collection of survey data in the USA shall be characterised. At the end of April 2020, the number of people who have an active infection was relatively high. At the beginning of the study, there were 813,510 infected people, and on the last day of the research, there were 1,007,185 cases of infections. The mortality rate was approximately 41,000 on April 20, 2020 and 56,000 on April 26, 2020.

Only then did the American society start to experience a serious threat to the health and safety posed by COVID-19. After the summer holidays, a dramatic increase in active cases and deaths caused by coronavirus took place. By the end of 2020, the number of infections was higher than 20 million, whereas the number of deaths was approximately 350,000.

Different numbers of infections in particular cities were observed as well. At the end of April, the highest number of infections was observed in the states of New York (more than 53,000), New Jersey (more than 11,000), in Massachusetts (more than 4000), in Florida (more than 4000). The lowest numbers of infected people were observed in South Dakota (68), North Dakota (94), Alaska (102) and Montana (147) (Distribution of reported cases of COVID-19 across US, 2020).

Moreover, it was observed that in the states where the highest number of infections was observed, the level of symptoms of stress and depression was higher, whereas in the states where the number of infections was relatively low, the feeling of threat was lower as well. Between April 23 and May 5, 2020, the highest levels of stress and depressions were observed in the state of New York (41%), Massachusetts (41%), Connecticut (40%) and Michigan (39%). The lowest percentage of people with mental disorders was observed in South Dakota (26%), Montana (27%), North Dakota (28%), Iowa (28%), Nebraska (29%) (Anxiety and depression, 2020).

For the whole population (aged 18–65+), the average result on the mental health scale is M = 11.16, SD = 3.66. The minimum value on the scale was 6, whereas the maximum value was 24. Cronbach's alpha internal consistency coefficient of the scale is 0.757. According to the established criteria, the lowest level of distress was determined to be at

the score of 10 points (39%), average between 11 and 24 points (26%) and high from 15 to 25 points (24%).

On the basis of the obtained data, it is necessary to say that the American society is under the influence of stress. Approximately a half of Americans experience mental health disorders. Among Americans, 73% experience anxiety and angst, 60% had trouble sleeping, 48% were feeling downhearted, 43% felt lonely and 18% experienced unpleasant somatic symptoms of stress.

The analysis of data conducted by American Trends Panel in March 2020 confirms the above diagnosis. The analysis shows that 72% of individuals had 0–1 symptoms, 15% had two symptoms, and 13% had three or more symptoms for at least 3 days (Holingue et al., 2020).

The obtained data on the Americans' mental health are worrying. The data indicates that at the beginning of the pandemic, internalising disorders occurred on a massive scale.

Particular attention shall be put on the youngest generation of Americans, which – similarly to young people in other countries – suffers a serious deterioration of their mental health (Marques de Miranda, da Silva Athanasio, de Sena Oliveira, & Silva, 2020).

The results of research conducted by the American Trends Panel indicate that the youngest generation (aged 18–29) had suffered the highest levels of distress (33%). In the age group 30–49 stress was experienced by 25% of individuals, 22% of respondents aged from 50 to 64 experienced stress, whereas among people aged 65 and older, the percentage was 15%. Among young Americans, 61% of respondents experienced average and high levels of mental disorders.

The ANOVA analysis confirms the hypothesis that age has a statistically significant impact on the mental condition of Americans. F value =118, p value =0,000, Eta^2 = 0,045.

It is necessary to stress the fact that the results of the ANOVA analysis indicate only slight differences between age groups on the scale of mental discomfort. Nonetheless, these differences are statistically significant. Moreover, one should bear in mind the fact that age is a factor that differentiates high levels of mental disorders to the greatest extent.

Therefore, as the above hypothesis has been confirmed, the next step of the analysis is to extract the youngest age category subsample (18–29 y.o.) from the whole data set. In-depth analyses show the mental condition of the American youth and indicate what factors have impact on it.

In the age category 18–29, the value on the mental health scale was between 6 and 24. M = 12,5, SD = 3,79. Cronbach's alpha internal consistency coefficient of the scale is 0.740. A positive and significant correlation was found between the total score of the scale and A factor (r = 0.776), B factor (r = 0,822), C factor (r = 0.717), D factor (r = 0,439), E factor (r = 0,670) and F factor (r = 0,498).

The distribution of answers to the questions included in the scale indicates that almost 80% of respondents experienced nervousness and anxiety over the last week. Around 70% had trouble sleeping. 60% were downhearted and experienced depressive moods. Young respondents experienced loneliness on a similar level. The two remaining symptoms were present less often. Only 15% were pessimistic about their future. Nonetheless, it is worth taking into account that almost 40% of respondents rarely felt optimistic. Every fourth respondent experienced somatic symptoms of stress, such as sweating, trouble breathing, nausea.

The results of research indicate that in the conditions of quarantine the majority of American youth experience negative emotions which may indicate the presence of psychosocial stress.

The results of the analysis of variance indicate which of the variables have impact on mental health of young Americans. The variables in which significant statistical differences were determined have been chosen for the analysis.

As indicated by numerous analyses regarding the impact of the pandemic on mental health of youth, male respondents have better mental condition than females (Mental health during COVID-19 outbreak. Wave 1, 2020). The next factor which has a significant impact on experiencing stress in the situation of the pandemic is the financial

situation of the respondents. The worse the evaluation of this situation, the worse the evaluation of mental condition.

An important factor which has impact on mental health is the marital status. It turns out that the young people who are married have the best mental condition. The divorced and widowed struggle hard to cope with the quarantine. The next variable which is connected with mental condition is the level of religiosity measured by means of the frequency of attendance in religious practices. The analyses indicate that mental health improves together with the increase in the frequency of religious practices. Yet another factor connected with mental health is citizenship or the lack of it. Young people devoid of citizenship feel better in terms of mental health than the citizens of the United States. The last element which has impact on mental condition were political views. In this case the people with conservative beliefs had the best state of being, whereas in the case of liberals it was the worst.

5. Discussion

The pandemic is a serious macrostressor and has a negative impact on the mental condition of Americans. It is indicated by the results of the study conducted by the American Trends Panel and other studies. The surveys from March and April 2020 indicate that a high level of stress in both measurements was experienced by 24% of respondents. Average stress levels in March were experienced by 26% of individuals and 25% of respondents in April. Average levels of distress were observed among 26% of respondents in March and 25% of respondents in April. Low levels of distress were observed among 50% of respondents in March and among 51% of the survey-takers in April (Ketter, 2020). Moreover, as indicated by the data that derives from dynamic studies, together with the duration of the pandemic-related stress, the indicators of mental health disorders increase as well. According to the Household Pulse Survey research, at the beginning of the quarantine, the symptoms of anxiety and depression had been observed among 36% of Americans, whereas closer to the end, the percentage grew to 42% (*Anxiety and depression,* 2020). It may be assumed that deprivation of needs, the feeling of threat and fatigue from the struggle to combat the pandemic influence the deterioration of mental condition of the society.

The conducted analyses indicate that young Americans find it most difficult to cope with the Covid-19 pandemic. Their mental condition indicates that they are under the influence of a major stress. Research conducted by the Household Pulse Survey indicate a worse condition of mental health among young people in comparison to older age groups. At the turn of April and May, anxiety disorders and depression were observed among 47% of respondents aged 18–29, 40% of respondents aged 30–39, 39% of respondents aged 30–49, 36% of respondents aged 50–59, 29% of respondents aged 60–69, 22% of respondents aged 70–79 and 21% of respondents who were 80 years old or older (*Anxiety and depression,* 2020). Deteriorated mental condition during lockdown has been shown in the studies conducted by McGinty, Presskreischer, Han, and Barry (2020), and J. Twenge and Joiner (2020).

Not only do the results of the analyses conducted on the sample of the youngest respondents allow for the observation of symptoms of disorders, but also they allow for identification of risk factors as regards the health of young Americans.

It turns out that young females endure the quarantine and its effects significantly worse. Negative evaluation of one's financial situation has impact on one's mental health. Perhaps people in unfavourable financial situation experience a bigger threat, are afraid of losing their jobs and a decrease in their income, which has impact on their mental health. It turns out that the young people who are married have the best mental condition. The divorced and the widowed have the biggest difficulties with coping with the quarantine. Perhaps the lack of social support and prior family traumas result in the fact that the pandemic is a traumatic experience for them. The analyses indicate that mental health improves together with the increase in the frequency of religious practices. This may mean that people who often attend church receive social support

from their religious groups and may believe that God, Providence look after their safety. Young people devoid of citizenship feel better in terms of mental health than the citizens of the United States. Perhaps in this case the individuals devoid of citizenship did not experience stress connected with Covid-19 in particular. The quarantine and its effects affected the citizens who worked, learned and became limited by the new regulations to a greater extent. The people with conservative beliefs had the best state of being, whereas in the case of liberals it was the worst. Perhaps for liberals the quarantine and limitations imposed by the authorities constituted further restrictions aimed at limiting civil liberties. Yet another explanation which was taken into account was the fact that the people with conservative beliefs were most often the supporters of the Republican Party and hence they were satisfied with the actions taken by the president Trump and his team. Liberals had different attitudes towards the pandemic and combating it. Negative attitudes towards the authorities and actions taken in connection with the pandemic may give rise to negative emotions.

The outbreak of the pandemic had impact on the deterioration of mental health of young people. It is indicated by the results of research conducted at the beginning of the quarantine. The symptoms of depression were observed among 49% of respondents aged between 19 and 29, whereas in December the percentage increased to 56%. In the general population, the percentage of depression and anxiety disorders increased by 5%, whereas in the case of young people the increase was 10% (*Anxiety and depression,* 2020). This trend is confirmed by other studies as well. The comparison of results obtained before the lockdown reveals that serious distress was observed among 3,6% of respondents aged between 19 and 29, whereas in the measurement carried out in 2020, the percentage increased to 38,4% (J. Twenge & Joiner, 2020). Similar tendencies are indicated by research conducted in Wales. The deterioration of mental health was observed between 2019 and 2020 in the general population; nonetheless, the most significant decrease of well-being was observed among the youngest respondents, aged 16–34 (Gray et al., 2020).

Perhaps the increase in unemployment to the extent comparable to the Great Depression in the 1930s had lead to the deterioration of mental health of youth. It is worth adding that during the recession which was given rise by the pandemic youth were in the worst situation. In the age group 16–24 the unemployment rate has increased from 8% in January 2020 to 25.3% in April 2020 (Kochhar, 2020). The limitation of consumption, a decrease in income and the fear of worsening of one's financial status in the upcoming months came to being together with unemployment. Research also indicates that almost a half of the representatives of the Generation Z maintain that they or their relatives experienced a decrease in incomes due to coronavirus (Parker & Igielnik, 2020). This situation might have ruined the ontological security (A. Giddens, 1991). It is worth stressing that youth were in an unfavourable socio-economic situation long before the pandemic (Standing, 2011). Social effects of the pandemic result in the fact that the American youth became the main defeated in the Covid-19 pandemic.

What is more, according to Anthony A. Giddens (2001), youth are the category which is on the margin of the adult society. Together with the rise of tensions in the social structure, young people have the worst experience of this situation. The pandemic may indirectly influence their process of entering adulthood in a negative way. The obtained results of research from the United States as well as the results from other countries may indicate the appearance of the phenomenon of the psychowave (Beck, 1992). Tensions appearing in the social system, entering the adulthood which is hindered and the appearance of relative deprivation together with the increase of fear of unknown reality may significantly worsen the social condition of young people. Especially the state of uncertainty and unpredictability of what could happen in the nearest future may increase the levels of stress among youth. Youth, as Kurt Lewin (1951) observes, are in a situation of transition. They are leaving the fields well-known to them and enter those which are unknown and give rise to uncertainty. Together with the rise of the

pandemic and a permanent violation of the current structures, the feeling of destabilisation among youth may accumulates, which could be reflected in the increase of the psychosomatic symptoms. It should be noticed that young people, due to the stage of development in which they are, spend most of their time in their peer groups. Together with the quarantine, young people were forced to limit their social contacts, which resulted in the deprivation of the need of affiliation. As a consequence of social isolation, the negative emotions, frustration and loneliness were given rise. The quarantine also influenced negatively their educational achievements and physical activity, which resulted in exhaustion with distant learning (Efuribe, Barre-Hemingway, Vaghefi, & Suleiman, 2020). This is confirmed by the results of research which prove that the younger the youth are, the higher the levels of stress (Ala'a, Akour, & Alfalah, 2020).

The studies carried out among Chinese (Liang et al., 2020) and German (Rauschenberg et al., 2020) youth indicate the negative impact of social isolation, deprivation of needs and fear of the future on the mental condition of young people. The deterioration of mental health of youth may be global. Young people become the main defeated of the pandemic which is reflected in their mental health. It should be expected that youth will suffer during economic recession in many countries, as it is taking place in the United States.

Finally, it is worth referring to the results of research, which indicate systematic deterioration of mental health among young Americans. Regular measurements indicate recurring occurrences of symptoms of depression as defined by the DSM-5 diagnostic criteria among 9% of adolescents aged 12 to 17 in 2004, and 16% of adolescents in 2019. The analyses show that the biggest increase of depressive disorders in total population was observed among the age group of 18–25 years (Substance Abuse and Mental Health Services Administration, 2020). Putnam (2000) and Jean J. Twenge (2017) point out to the deterioration of mental health indicators among young people. The authors pay attention to the fact that young people in the United States have worse mental health indicators than the older generations. According to them, lower satisfaction with life, greater depression and suicides are the results of isolation, loneliness, and excessive use of the Internet and digital devices. Therefore, it should be stated that the bad mental condition of young Americans is nothing unusual, but it constitutes a norm. In the situation of the pandemic, the symptoms of bad mental health may be more noticeable. In the situation of Covid-19-related stress, previous psychological traumas reveal themselves.

The deterioration of mental health of youth in the situation of a generally worse mental condition may have negative impact on the society's capability to adapt to the post-pandemic world. Youth are usually perceived as a trigger for changes. Societies often made use of their talents, power and innovativeness in the times of changes, and supported their force that triggers modernisation (Mannheim (1952)). Taking into account both of the studies into American youth and those carried out in other countries (Rauschenberg et al., 2020), it should be expected that young people may be problematic for the society, and they may need support and help. The increase of expenses on health services, increase in risky behaviours, increased demand on psychological help are only some of the problems which may appear in the future. By making reference to the question stated by Mannheim ([1927] (1952)), that is, "what do young people mean to the society in such a situation", it should be assumed that the answer is "problems that the adults will have to solve". Youth instead of becoming the trigger for changes may become the reason of social disorganisation.

6. Limitations

The conducted studies have certain limitations. The results derive from prepared databases and therefore they do not allow for more detailed analyses. It is known that young people constitute a differentiated category, which includes school students, university students and young adults, both working and unemployed. Therefore, the researched

young people are in different situations. Some of them are stressed because of distant learning, the others stressed by losing jobs and income.

Unfortunately, in the APT the age was measured with the use of the ordinal scale and thus it was impossible to research the differences between mental health of adolescents and young adults. The range of the measurement also influenced the choice of the method of statistical analysis. Analysis of variance must have been used instead of regression analysis.

Parts of the following scales have been used in the measurement of mental health: CES —D (Radloff, 1977), GAD -7 (Spitzer, Kroenke, Williams, & Löwe, 2006), and IES -R (Weiss, 2007). This might have affected the obtained results. The Cronbach's α of 0.74 suggests that this scale has adequate but not excellent internal reliability. More detailed measurements would be possible if original measurement methods had been applied.

The analysis of the influence of the pandemic on mental health of young people should also be approached with great reserve. The conducted studies fail to give grounds to the cause-and-effect interpretation of the results. In order to find an answer to the question whether the pandemic influenced mental health of young people, panel studies among a constant group of respondents, with the use of the same methods, need to be conducted.

References

Anxiety and depression. (2020). National Center for HealthStatistics. https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm.

Distribution of reported cases of COVID-19 across US. https://public.tableau.com/profile/vineet.viswakumar#!/vizhome/COVID-19USA_15856050572770/Sheet3, (2020).

Mental health during COVID-19 outbreak. Wave 1.(2020). On 1. July.2020. https://www.mhrc.ca 〉 wp-content 〉 uploads 〉 2020/05.

Substance Abuse and Mental Health Services Administration. (2020). Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/.

Ala'a, B., Akour, A., & Alfalah, L. (2020). Is it just about physical health? An internet-based cross-sectional study exploring the psychological impacts of COVID-19 pandemic on university students in Jordan using Kessler psychological distress scale. medRxiv. doi: doi:https://doi.org/10.1101/2020.05.14.20102343.

Beck, U. (1992). *Risk society: Towards a new modernity.* London: Sage.

Branquinho, C., Kelly, C., Arevalo, L. C., Santos, A., & Gaspar de Matos, M. (2020). "Hey, we also have something to say": A qualitative study of Portuguese adolescents' and young people's experiences under COVID-19. *Journal of Community Psychology, 2020,* 1–13. https://doi.org/10.1002/jcop.22453.

Demertzis, N., & Eyerman, R. (2020). Covid-19 as cultural trauma. *American Journal of Cultural Sociology, 8*(428–450), 2020. https://doi.org/10.1057/s41290-020-00112-z.

Efuribe, C., Barre-Hemingway, M., Vaghefi, E., & Suleiman, A. B. (2020). Coping with the COVID-19 crisis: A call for youth engagement and the inclusion of young people in matters that affect their lives. *The Journal of Adolescent Health, 67*(1), 16–17. https://doi.org/10.1016/j.jadohealth.2020.04.009.

Gerhold, L. (2020). COVID-19: Risk perception and coping strategies. Results from a survey in Germany. PsyArXiv, 25 Mar. doi: 10.31234/osf.io/xmpk4.

Giddens, A. (1991). *Modernity and self-identity: Self and society in the Late Modern Age.* Cambridge: Polity Press.

Giddens, A. (2001). Sociology. In *Cambridge: Polity press.* Oxford: Blackwell.

Gómez-Salgado, J., Andrés-Villas, M., Domínguez-Salas, S., Díaz-Milanés, D., & Ruiz-Frutos, C. (2020). Related health factors of psychological distress during the COVID-19 pandemic in Spain. *International Journal of Environmental Research and Public Health, 17*(11), 3947.

Gray, N. S., O'Connor, C., Knowles, J., Pink, J., Simkiss, N. J., Williams, S. D., & Snowden, R. J. (2020). The influence of the COVID-19 pandemic on mental well-being and psychological distress: Impact upon a single country. *Frontiers in Psychiatry, 11.*

Holingue, C., Badillo-Goicoechea, E., Riehm, K. E., Veldhuis, C. B., Thrul, J., Johnson, R. M., … Kalb, L. G. (2020). Mental distress during the COVID-19 pandemic among US adults without a pre-existing mental health condition: Findings from American trend panel survey. *Preventive Medicine, 139,* 106231. https://doi.org/10.1016/j.ypmed.2020.106231.

Hyland, P., Shevlin, M., McBride, O., Murphy, J., Karatzias, T., Bentall, R.P., Martinez, A., Vallières, F. (2020). Anxiety, depression, and traumatic stress in the UK general population during the COVID-19 pandemic. www.https://psyarxiv.com. [on 28. May 2020].

Ketter, S. (2020). A third of Americans experienced high levels of psychological distress during the coronavirus outbreak. https://www.pewresearch.org/fact-tank/2020/05/07/a-third-of-americans-experienced-high-levels-of-psychological-distress-during-the-coronavirus-outbreak/.

Kochhar, R. (2020). Unemployment rose higher in three months of COVID-19 than it did in two years of the great recession. *June, 12*, 2020. https://www.pewresearch.org/fact-tank/2020/06/11/unemployment-rose-higher-in-three-months-of-covid-19-than-it-did-in-two-years-of-the-great-recession/.

Levkovich, I., & Shinan-Altman, S. (2020). Impact of the COVID-19 pandemic on stress and emotional reactions in Israel: A mixed-methods study. 27 May 2020, PREPRINT (Version 1) available at Research Square [+doi:10.21203/rs.3.rs-30346/v1+].

Lewin, K. (1951). *Field theory of social science: Selected theoretical papers.* New York: Harper & Brothers.

Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., & Mei, S. (2020). The effect of COVID-19 on youth mental health. Psychiatric Quarterly, 1.July 2020. doi:https://doi.org/10.1007/s11126-020-09744-3.

Mannheim, K. (1952). "The problem of generations". In Kecskemeti, P. (ed.). Essays on the sociology of knowledge: Collected works, Volume 5. New York: Routledge. p. 276–322.

Mazza, C., Ricci, E., Biondi, S., Colasanti, M., Ferracuti, S., Napoli, C., & Roma, P. (2020). A nationwide survey of psychological distress among italian people during the COVID-19 pandemic: Immediate psychological responses and associated factors. *International Journal of Environmental Research and Public Health, 17*(9), 3165.

McGinty, E. E., Presskreischer, R., Han, H., & Barry, C. L. (2020). Psychological distress and loneliness reported by US adults in 2018 and April 2020. *JAMA, 324*(1), 93–94. https://doi.org/10.1001/jama.2020.9740.

de Miranda, D. M., da Silva Athanasio, B., de Sena Oliveira, A. C., & Silva, A. C. S. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents? International Journal of Disaster Risk Reduction. 101845. doi.org/10.1016/j.ijdrr.2020.101845.

Parker, K., Igielnik, R. (2020). On the cusp of adulthood and facing an uncertain future: What we know about gen Z so far. On 13 May 2020 https://www.pewsocialtrends.org/essay/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far/.

Putnam, R. (2000). *Bowling alone: The collapse and revival of American community.* New York: Simon & Schuster.

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020a). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. General Psychiatry, 33(2), e100213. On 26 June 2020 doi:https://doi.org/10.1136/gpsych-2020-100213.

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020b). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. General Psychiatry,33(2):e100213. Published 2020 Mar 6. doi:https://doi.org/10.1136/gpsych-2020-100213.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the General Population. Applied Psychological Measurement,1(3), 385–401.https://doi.org/10.1177/014662167700100306.

Rauschenberg, C., Schick, A., Goetzl, C., Röhr, S., Riedel-Heller, S., Koppe, G., Reininghaus, U. (2020).Social isolation, mental health and use of digital interventions in youth during the COVID-19 pandemic: a nationally representative survey. 1 July 2020. doi:10.31234/osf.io/v64hf.

Methodology report. (2020). Pew Research Center's American Trends Panel Wave 66. https://www.journalism.org/dataset/american-trends-panel-wave-66/.

Ruan, Q., Yang, K., Wang, W., Jiang, L., & Song, J. (2020). Clinical predictors of mortality due to COVID-19 based on an analysis of data of 150 patients from Wuhan, China. *Intensive Care Medicine, 46*(5), 846–848.

Shevlin, M., McBride, O., Murphy, J., Miller, J. G., Hartman, T. K., Levita, L., … Bennett, K. M. (2020). Anxiety, depression, traumatic stress, and COVID-19 related anxiety in the UK general population during the COVID-19 pandemic. PsyArXiv, 18 Apr. 2020. Web.

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine.* https://doi.org/10.1001/archinte.166.10.1092.

Standing, G. (2011). *The precariat. The new dangerous class.* New York and London: Bloomsbury Academic.

Twenge, J. (2017). iGen. Why today's super-connected kids are growing up less rebellious, more tolerant, less happy—And completely unprepared for adulthood-and what that means for the rest of us. New York:Atria Books.

Twenge, J., & Joiner, T. (2020). Mental distress among US adults during the COVID-19 pandemic. June 12.2020. doi:10.31234/osf.io/wc8ud.

Weiss, D. S. (2007). The impact of event scale: Revised. In Cross-cultural assessment of psychological trauma and PTSD (pp. 219–238). Springer.