BSc in Psychology

Department of Psychology

Effects of Covid-19 Lockdowns on Symptoms of Social Anxiety in a Sample of University Students

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Foreword

Submitted in partial fulfillment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

This thesis was completed in the Spring of 2022 and may therefore have been significantly impacted by the COVID-19 pandemic. The thesis and its findings should be viewed in light of that.

Abstract

With people socializing every day by going to school, work, and other social environments, the Covid-19 pandemic has been met with extensive social distancing measures. These measures put a big part of people's everyday life on hold with perhaps the biggest impact on their social lives. The threat of a global pandemic and imposed measures of social lockdown can reasonably be expected to exacerbate mental health problems, such as social anxiety where avoidance of social situations is a key maintenance factor of the problem. Will the Covid-19 lockdowns have effects on social anxiety symptoms on a sample of university students in Iceland? The current study used a dependant t-test to measure between the pre Covid-19 and post Covid-19 time periods. Participants consisted of 378 students in Reykjavik University from the ages 18 to 66+ years old. Gender ratio was 50,3% female, 30,6% male and 19,1% other or missing. Participants were asked to self-evaluate symptoms on various anxiety disorder scales, such as SIAS/SPS6. Results showed an increase in social anxiety symptoms and significant difference between the two time periods. These findings can shine a light on how the pandemic has impacted people‘s mental health, especially social anxiety.

Keywords: Covid-19, lockdown, social anxiety, social distancing, Social phobia scale (SPS), Social interaction anxiety scale (SIAS)

Útdráttur

Á hverjum degi þar sem fólk er félagslega virkt í alls konar hvunndagsiðju, svo sem að fara í skóla, vinnu og víðar í umhverfi sem iðar af félagslífi þá hefur Covid-19 heimsfaraldurinn sett strik í reikninginn í félagslíf margra með umfangsmiklum samkomutakmörkunum og bönnum. Þessar aðgerðir settu stóran hluta af hversdagslífi fólks í pásu og þar af mest félagslíf fólks. Það er hægt að ganga út frá því að ógn frá heimsfaraldri stafi á andlega líðan fólks, þar á meðal félagskvíða þar sem einn aðal viðhaldsliður félagskvíða er forðun frá félagslegum aðstæðum. Munu Covid-19 samkomutakmanir hafa áhrif á einkenni félagskvíða á úrtaki íslenskra háskólanema? Þessi rannsókn notaðist við parað t-próf til að meta muninn milli tveggja tímabila, fyrir og eftir Covid-19 faraldurinn. 378 þátttakendur tóku þátt í rannsókninni frá aldrinum 18 til 66+ ára. Kynjahlutfallið var 50,3% konur, 30,6% karlar og 19,1% annað eða svar ábótavant. Þátttakendur mátu einkenni sín sjálfir út frá kvíðaraskana skölum, til dæmis SIAS/SPS6. Niðurstöður sýndu fram á aukningu á einkennum félagskvíða milli tímabilanna og marktækan mun á milli þeirra. Niðurstöður þessarar rannsóknar geta sýnt betur hvernig Covid-19 heimsfaraldurinn hafði áhrif á andlega líðan fólks, þá sérstaklega félagskvíða.

Lykilorð: Covid-19, félagskvíði, samkomutakmarkanir, Social Phobia Scale (SPS), Social Interaction Anxiety Scale (SIAS)

Effects of Covid-19 Lockdowns on Symptoms of Social Anxiety in a Sample of University Students

In a world filled with people socializing every day by going to school, work, and into other social environments, the Covid-19 pandemic has been met with extensive social distancing measures. That includes home quarantine, curfews, and social distancing policies (Arad et al., 2021). These measures put a big part of people's everyday life on hold with perhaps the biggest impact on their social lives. Schools, from elementary schools to universities, were shut down for a period of time and students attended classes and studied at home. For adolescents and young adults, an active social life is important for personal development, and disruption in social connectedness for a long period of time can have a negative impact on the mental health of young people (Gruber et al., 2021). The threat of a global pandemic and imposed measures of social lockdown can reasonably be expected to exacerbate ongoing mental health problems such as depression, social anxiety, and health anxiety. In the case of social anxiety where avoidance of social situations is a key maintenance factor of the problem (Heimberg et al., 1995), social distancing rules and self-isolation can be expected to make future social interactions more anxious provoking that in turn will lead to more active avoidance. Social activities such as learning at school with friends, attending a party, taking a trip to the theatre, all of which are filled with people around you could be hard to return to when all is normal again.

„Humans are social beings“ (Haslam et al., 2009). We humans, as a group, are very social by nature. We have family and friends, we work with people at the workplace and learn with people at school, we engage in social activities almost every day and we are a part of a community. In an old, but respected, article by Durkheim, he establishes the link between social isolation and a decrease in psychological well-being. He explains how one will experience negative feelings and emotions when a dramatic social change occurs in an individual’s life (Durkheim, 1951). This change can serve as a determiner of mental health (Compton & Shim, 2015). To understand the important links that are between social connectedness and mental health, we must look at risk factors for mental health that have been thoroughly researched before. In a study focused on social determinants of mental health, it was established that risk factors for many common mental disorders are due to heavy association with social inequalities, the higher the inequality the higher the risk for a disorder (Allen et al., 2014; Said et al., 2013). Furthermore, studies suggests that social interactions and connectedness are great predictors of people´s mental health, well-being, and health in general (Kawachi & Berkman, 2001; Taylor & Brown, 1988). This shows how the important role of socializing is connected as a risk factor for an individual’s mental health.

In light of social distancing measures, it is important to understand whether they can have a negative impact on symptoms of social anxiety. In short, social phobia (or social anxiety disorder) is when an individual who fears social situations tries to avoid such situations as much as possible, when that fails and that individual has to engage in a feared social situation he tries to avoid the occurrence of threat by the utilization of safety-seeking behaviours (Clark, 1997; Heimberg et al., 1995; Wells et al., 1995). The cognitive perspective on the social phobia model explains how negative thoughts are reactions to feared situations, and how these negative thoughts are driven by excessively high standards for social performance, self-doubt, and fear of people’s negative opinions. Safety behaviours then occur, including hiding weaknesses like sweat and shakiness, eye contact avoidance, deep breaths, and focusing on calming himself. The focus of the socially anxious individual is solely on himself, the image of him looking stressed, embarrassed, and shaking in front of all the people around him which results in the individual being extremely self-conscious. When viewed as a whole, this induces the social phobia symptoms which are for example sweatiness, hot flushes, blushing and trembling.

A longitudinal study was made on the effects of restrictions due to Covid-19 on young people’s mental health. The findings of the study demonstrated an increase in social anxiety following the Covid-19 pandemic. Notably, it is mentioned that during the lockdown, only for some, it worked as a respite from social pressures, and social anxiety decreased (Hawes et al., 2021). However, this would only work as a short-term solution for said individuals as they must return to normal life in the near future. In a similar study by Zheng et al. (2020), findings showed as well the pandemics‘ impact on mental health, they conclude that this is more so the result of psychological distancing. A few more studies provide further proof that psychological distancing works as a big risk factor and has a great negative impact on people´s mental health (Doman & Le Roux, 2012; Jackson & Cochran, 1991; Johnson et al., 2001). As for the Icelandic reality of the matter, a study on the impact on the mental health of adolescents by the Covid pandemic was made in early 2021. Results showed that the pandemic had a negative impact on the well-being of Icelandic adolescents where depressive symptoms had increased over expected nationwide scores. Furthermore, the mental health of girls was found to be significantly more affected than that of boys (Halldorsdottir et al., 2021).

How has the socially restricted world been impacting people that have already been dealing with social anxiety before the pandemic took place? A study conducted in Israel on a sample of university students (N = 99) assesses social anxiety symptoms pre-lockdown as well as during lockdown. The students had been in a 2-month lockdown which affected their semester critically by studying at home and communicating almost only through online meetings. Their findings indicated that for students that experienced social anxiety symptoms during a nonlockdown semester experienced an eventual decrease in symptoms over the course of the semester, whereas when a lockdown semester occurred the social anxiety symptoms maintained and were unchanged at the end of the semester (Arad et al., 2021). This shows how a lockdown-affected circumstance can impact social anxiety symptoms in people and can be seen as a maintenance factor for individuals who already suffer from social anxiety, whereas the lockdown is evidently a reinforcer for the social phobic as it is a practice of active avoidance.

Current Study

The aim of the current study was to examine if Covid-19 lockdowns have effects on social anxiety symptoms in university students in Iceland. Following the periodic deprivation of access to a social environment due to lockdowns, will an individual display a lack of social aptitude and/or display symptoms of social anxiety disorder? The hypothesis of this study is that participants experienced an increase in social anxiety symptoms after the Covid-19 period compared to the pre Covid-19 period. Social distancing and major curfews following the pandemic are relatively new to us and not much is known of the impact and consequences for the mental side of this phenomenon. It is important to observe and study this subject furthermore. The results of this study can enlighten people on how big of a degree the problem of mental health issues are in the context of the pandemic occurring could be as of now and perhaps in the near future. Will the Covid-19 lockdowns have effects on social anxiety symptoms in a sample of university students in Iceland?

Method

Participants

A convenience sample was used in this study to gather participants. All students at Reykjavik University were offered to participate. It was made clear to participants that they could withdraw from the study at any time and that the study's results were kept anonymous throughout the study process. Participants consisted of 476 students (N=467) from the ages 18 to 66+ years old, the majority of them or 39.1% in the 22 to 25 years old age span. Women were a total of 235 or 50.3% of the sample and men were a total of 143 or 30.6%, 89 participants or 19.1% defined themselves as another gender or their answer was missing from the questionnaire. Participants could enter a raffle with rewards for participating in the research.

Materials

Social anxiety symptoms. The Social Interaction Anxiety Scale (SIAS) and Social Phobia Scale (SPS) are both 20-item questionnaires, although for this current study it was reduced to a 6-item questionnaire for each scale, so a combined SIAS and SPS (SIAS/SPS6) 12-item questionnaire was used (Peters et al., 2012). The SIAS and SPS self-evaluate social anxiety and social phobia symptoms in a variation of daily life social interactions (conversations, eating amongst people, being in crowded places), the scales include a description of daily life interaction which is comprised of symptoms of social anxiety. Descriptions are then based on a 5-point Likert scale, with 0 indicating "Not at all characteristic or true of me", 2 "Moderately characteristic or true of me", and 4 "Extremely characteristic or true of me". Participants can therefore score from 0 up to 48. Results in reliability, validity and internal consistency suggested a positive outcome as did the scales' discrimination from other mental disorders, therefore proving the scales' reliability as an evaluation tool (Le Blanc et al., 2014; Mattick & Clarke, 1998). It is worth to note, for the current study, the scale´s questionnaire was adapted to a "before and after" covid-related question. For Time 1, participants were asked to evaluate symptoms over the last month (post Covid-19), and for Time 2, participants were asked to think back from before the Covid-19 had impacted the world and evaluate symptoms from that time period (pre Covid-19). The questionnaire was translated into the Icelandic language as the participants were Icelandic university students. A study in Iceland on the original translated versions suggested good reliability, validity and discrimination (Ólafsdóttir, 2012), and likewise did a study on the shortened translated version of the SIAS/SPS6 (Eysteinsson et al., 2021).

Depression symptoms. The Patient Health Questionnaire-9 (PHQ-9; Kroenke & Spitzer, 2002) is a nine-item survey that evaluates symptoms of depression during the last two weeks. The scale is scored on a 4-item Likert scale, with a higher score indicating more symptoms. It has a high level of reliability, validity, and internal consistency (Kroenke et al., 2001). According to an unpublished graduate study on the Icelandic translated version of PHQ-9, it has a high level of reliability and validity (Pálsdóttir, 2007).

General anxiety symptoms. The Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006) is a 7-item scale that measures the severity of anxiety symptoms over the previous two weeks (Beard & Björgvinsson, 2014). The scale is scored on a 4-item Likert scale, with a higher score indicating more symptoms. The GAD-7 has been proved to be a good screening tool for GAD, panic disorder, social anxiety disorder, and PTSD (Kroenke et al., 2007). Both the original and Icelandic versions are highly reliable and valid, with superb internal consistency (Ingólfsdóttir, 2014; Löwe et al., 2008).

Research design/Data analysis

This study was performed with a quantitative research strategy. The dependent variable in this study was social anxiety symptoms which were measured with the SIAS/SPS6, and the independent variable was the two time periods. A within-group comparison was performed since participants were asked to evaluate symptoms in the two different time periods. This study's hypothesis is that people will induce an increase in social anxiety symptoms during the Covid-19 period from the pre-Covid-19 period, therefore the two time periods for the groups of the within-group comparison will be referred to as the pre Covid-19 group (Time 1) and the experimental group, therefore, being the post Covid-19 group (Time 2). All data analysis from the research was processed in SPSS version 27. To describe the participants´ scores on the SIAS, SPS, PHQ-9, and GAD-7, descriptive statistics were used. Change in measurements of the mean scores in SIAS/SPS6 symptoms was examined with dependant t-test analysis with time as a within-subject factor. Furthermore, a cut-off score of ≥ 20 on the SIAS/SPS6 was used, indicating a marked impairment, to categorize participants as “not-socially anxious” and “socially anxious”. To see if a significant difference was between the cut-off count in the two time periods, a Chi-Square test was performed.

Procedure

This research was part of a larger research managed by the staff of Reykjavík University named “Líðan háskólanema á tímum heimsfaraldurs” which translates to “University student's well-being during pandemic times”. It was performed via an online survey, whereas an email was sent to all registered students at Reykjavik University which offered them to participate in the research by answering the online survey. Before partaking in the online survey, each participant was provided with an informed consent letter in which they had to accept to enter the survey and participate, they were also informed that they could withdraw from the survey at any time. Participants were then laid out with the questionnaires of the survey which consisted of 27 pages. For this study the SIAS and SPS scale was one of the questionnaires, participants were asked to evaluate themselves in the context of the scales at two different time periods. Firstly, they were asked to evaluate symptoms as of the present time (post Covid-19). After that, participants were asked to think back and evaluate symptoms at the time before Covid-19 started (pre-Covid-19). The study was approved by the National Bioethics Committee in Iceland (VSN-20-210).

Results

Table 1 shows the descriptive statistics for self-evaluated symptoms from the SIAS/SPS6 pre Covid-19 time period, SIAS/SPS6 post Covid-19 time period and both PHQ-9 and GAD-7 were in the post Covid-19 time period. The table presents the number of valid answers, the range for the highest and lowest values, the mean score and the standard deviation for how many symptom points participants scored of available symptom points on the measuring scales.

Table 1

Descriptive Statistics for Symptom Scores on the Study's Measuring Scales

Measures/ Scale	*n*	*M*	*SD*	Observed range
SIAS/SPS6 Pre Covid-19	273	9.66	9.89	0-45
SIAS/SPS6 Post Covid-19	269	10.77	10.11	0-44
PHQ-9	273	8.06	5.57	0-25
GAD-7	275	7.10	5.08	0-21

Table 1 shows that participants scored an average of 9.66 points out of 48 available on the SIAS/SPS6 pre Covid-19 timestamp with the standard deviation of 9.89. Lowest score was 0 and highest score was 45. When asked to evaluate symptoms after the Covid-19 times, participants averaged of 10.77 points on the SIAS/SPS6 and the standard deviation being 10.11. Lowest score was 0 and highest score was 44. Participants' score on the PHQ-9 scale was an average of 8.06 out of 27 available, with a standard deviation of 5.57. On the GAD-7 scale, participants averaged of 7.10 out of 21 available and standard deviation being 5.08.

Table 2

Symptom Evaluation Mean Scores and Cut-Off Score Count of the Time Periods Variable

Symptom evaluation/Cut-off	Pre Covid-19	Post Covid-19
Mixing with group	1.95	2.01
Talking in front of others	1.81	1.87
Attention worries	2.00	2.08
Eye contact	2.17	2.25
Tense when meeting others	1.91	2.10
Stared at when walking	1.81	2.05
Cut-off count	41	45
Cut-off mean score	28.71	28.61

Table 2 displays the mean scores of the evaluated symptoms of the SIAS/SPS6 questionnaire, the count of how many made the cut-off score on both pre and post Covid-19 pandemic times as well as the mean score for participants that made the cut-off score on both time periods.

In the current study, it was hypothesized that participants would experience an increase in social anxiety symptoms after the Covid-19 period compared to the pre Covid-19 period, so a comparison for the two time periods was made. Each evaluated symptom from the questionnaire was measured from 0 - 4 and mean scores of a selection of six are shown in Table 2. The highest increase was the “stared at when walking” symptom with an increase of 0.24 in mean score from the pre Covid-19 to post Covid-19 time. Regarding the cut-off count, 45 participants made the cut-off on the SIAS/SPS6 in the post Covid-19 time period compared to the 41 that made the cut-off from the pre Covid-19 time period. Chi-Square test was performed to see if a significant difference was between the two cut-off scores, results indicated a significant difference with the Pearson Chi-Square being $\chi^2(1) = 174.72$, $p = < 0{,}001$. Participants that made the cut-off mean score from pre Covid-19 time were compared to their mean score on post Covid-19 time, results showed close to no difference in the mean scores. Moreover, a total of 5 participants that made the cut-off score on the pre Covid-19 time did not reach the cut-off score on the post Covid-19 time.

To see if the difference between the overall mean scores of the SIAS/SPS6 on the two time periods were significant, a dependant t-test was performed. The results from the t-test showed a significant difference $F(1, 267) = 4.155$, $p = < 0{,}001$. Therefore, the results indicate that participants did indeed experience a significant increment in social anxiety symptoms and thus this study’s hypothesis was supported.

Discussion

The purpose of this study was to examine the effects of the Covid-19 pandemic's social lockdowns on symptoms of social anxiety in a sample of university students. The study hypothesized that Covid-19 lockdowns would impact social anxiety symptoms and would increase participants' social anxiety symptoms compared to symptoms evaluated before the Covid-19 pandemic occurred.

The study´s findings suggest that an increase in social anxiety symptoms did occur among university students in the context of the Covid-19 pandemic and its social lockdowns and curfews, which supports the study's hypothesis. The results showed an increment of the mean scores of the evaluation scales and indicated a statistically significant difference in the self-evaluation of the participants on the social anxiety scale SIAS/SPS6 in the pre Covid-19 time period versus the post Covid-19 time period. These results are consistent with the findings of prior research from Hawes et al. (2021), who studied the pandemics' effect on social anxiety symptoms, and concluded that there is an increase in social anxiety symptoms compared to the pre-pandemic times. Furthermore, the current study also supports the findings of Gruber et al. (2021), whereas it was shown how a lack of social connectedness can disrupt people's lives and impact their mental health. These similarities further indicate the pandemic's impact on people's mental health, especially when returning to a normal life after being socially isolated for a prolonged period of time from other people, and its consequences on lack of social connectedness which leads to an increase in social anxiety symptoms. Of further interest, the connection between psychological distancing while in lockdown and later display symptoms of social anxiety as Zheng et al. studied, is in line with the current study. Findings such as these highlight the importance of social connectedness, how we as humans are dependent on social interactions and activity on a daily basis to avoid coming to a halt socially wise which can be expected to negatively impact our well-being.

Data findings showed the mean scores for PHQ-9 and GAD-7 symptom scales, PHQ-9 mean score being 8.1 and GAD-7 mean score being 7.1 which can be interpreted as rather high for young adults in context of the cut-off score threshold for having marked impairment being ≥ 10, to which a mean of 8.1 and 7.1 comes quite close to. This shows the mental health status of young adults in a very early stage after the end of a pandemic and further indicates how it has negatively impacted people's well-being.

As previously mentioned in the current study, social phobia is when an individual that fears social situations tries to avoid social situations as much as he possibly can, and when such a situation is inevitable, the individual engages in safety behaviours (Clark, 1997; Heimberg et al., 1995; Wells et al., 1995). The safety behaviours, to some degree, are the symptoms that an individual induces in social circumstances, for example, sweating, shaking, and avoiding eye contact. As this study's findings suggested, symptoms had increased from the pre Covid-19 time to post Covid-19 time, and as seen in Table 2, the means for each evaluated symptom had all increased to some extent except for one. Interestingly, the symptoms "being tense when meeting an acquaintance" and "fear of being stared at when walking" had the highest increase of the symptom means or both around 0.2 score increase on the SIAS/SPS6. These findings are in line with the cognitive model of social phobia of engaging in safety behaviour and even further show how the pandemic has impacted an increase in such behaviours, thus increasing social anxiety symptoms. This could be interpreted as becoming "rusty" at something, socially wise in this case, when not engaging in a specific activity for a while and therefore an individual begins to doubt himself, resulting in negative thoughts about a social situation and generate an excessively high standard to social performances. This perspective on an individual's state of mind could be the reason for the increase in social anxiety symptoms when returning to a normal life after nearly two years of a pandemic situated world.

Results for the cut-off score count for the SIAS/SPS6 were interesting to examine. With a cut-off score threshold of ≥ 20, 41 participants made the cut-off in the pre Covid-19 time period, and that number increased by 4 participants in the post Covid-19 period or 45 in total who made the cut-off score. A Chi-Square test showed a p score of < 0.001 which confirmed the significance of the count difference between the two time periods. These findings show how more people did induce social anxiety symptoms following the pandemic and even an increase in people that reach a clinical marked impairment zone for social anxiety disorder. A meta-analysis was done on the delayed effects of Post-traumatic stress disorder (PTSD), findings concluded that PTSD may develop and manifest itself up to >6 months later (Utzon-Frank et al., 2014). Although, the pandemic is not being defined as a traumatic event for most, theoretically, the number of people that will reach a cut-off score on said disorder scale could increase even more considering we are only a couple of months out since the pandemic's lockdowns were fully lifted at the time this study is written.

In Arad et al.'s study, they concluded that social lockdown circumstances could work as a maintainer for social anxiety (2021), it is an interesting subject to examine whether people, who were already socially anxious before the pandemic hit, would induce an even higher score on the SIAS/SPS6 in the post Covid-19 measure compared to the pre Covid-19. As mentioned before, for some individuals, being in social isolation worked as a respite from social pressure and social anxiety decreased (Hawes et al., 2021). This is partially consistent with the current study, as the participants that made the cut-off score count on the pre-pandemic times and were therefore defined as socially anxious from before Covid-19. Those participants did not induce more symptoms in the post-pandemic time and there even was a minuscule decrease in the mean score. These findings of the current study are in line with Arad et al.'s study as the lockdown-based circumstances maintained the social anxiety symptoms. Moreover, it also supports the findings of Hawes et al.'s study that some of the already socially anxious participants, from before the pandemic times, seems to have slightly reduced social anxiety symptoms after pandemic times. Furthermore, the findings also show that a total of 5 participants who reached the cut-off score from the pre Covid-19 time did not reach the cut-off score on the post Covid-19 time and the highest score a participant scored on the SIAS/SPS6 from both time stamps was in the pre Covid-19 time period.

With these findings in hand, the pandemic seems to have had more impact on symptoms of social anxiety in people that were not considered as socially anxious from before Covid-19, as determined from the cut-off score, than people that were considered to have social anxiety to some degree from before the pandemic hit as most of their mean scores were unchanged and even decreased. Theoretically, the Covid-19 lockdowns may have worked as a relief for socially anxious people as they could take a break from social encounters for a period of time and come back to a normal life more relaxed. Since this being a small sample of the participants, this could be interpreted to only work for some individuals and not to be generalized.

Limitations of this study are also important to be noted. In the current study participants were asked to evaluate their social anxiety symptoms in two different time periods. A threat to internal validity is likely to take place here as they were asked to think back from two years before (pre Covid-19) and evaluate symptoms from that time. Evaluation of that kind is not as reliable as it would have been if participants had answered the same questionnaire before the pandemic took place and scores from those two time periods had been compared, although it must be addressed that a pandemic should be hard to predict. For future research of a similar genre, this should be done to secure its internal validity. Another limitation that must be addressed is the possibility that other factors that are unrelated to the pandemic's impact might in one way or another have affected the study's outcome which cannot be excluded. Despite these limitations, the findings of this study offer useful information and help to better understand the impact the pandemic has had on the mental health perspective on the matter.

Major social restrictions were enforced in Iceland periodically at the time of the Covid-19 pandemic, leaving people to be heavily homebound and not engaging in as many social activities as was the normality before the pandemic. If the burden of mental disorders in Iceland is in fact growing among young adults following the pandemic, as indicated in Halldorsdottir et al. study (2021), it is important to further study this field of subject and to carry on performing mental health studies on samples of Icelandic university students. Further studies on this matter could be critically important as symptoms of such social circumstances, or any traumatizing event, can occasionally be delayed up to a couple of years (Gan et al., 2020). In the context of the pandemics' impact on mental health, which has been thoroughly shown in the current study, this delay of a possible mental disorder could well be the case here. Frequent studies of said material should be strongly encouraged to have a good overview of and further monitor individuals who may suffer from mental disorders following the pandemic in coming years.

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