COMPARISON OF BURNOUT LEVELS OF EDUCATORS/TEACHERS IN THE PRE-PANDEMIC AND PANDEMIC PERIODS OF COVID-19

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Abstract

Evidence suggests that the mental health and psycho-psychopathological consequences of the COVID-19 pandemic in the general population include an increase in symptoms of anxiety and depression, addictive behaviors, and psychological distress (Osváth, 2021; Galea, Marchant & Lurie, 2020). The prevention and mitigation of negative effects require the development and application of general and specific methods that support mental hygiene. Psychological distress due to the epidemic affects the risk of burnout in helping professionals, as it significantly increases the level of emotional exhaustion and depersonalization and reduces the feeling of personal effectiveness (Mion et al, 2021).
At the 2021 International Conference on Education and New Developments, we presented our research, in which we involved the staff of the Somogy County Pedagogical Service, mainly special education teachers. The 116-person sample was conducted with a version of the Maslach Burnout Inventory developed for educators (Maslach Burnout Inventory-Educator's Survey) in the pre-COVID-19 pandemic period. In our presentation, we present the results of a survey conducted in December 2021 with a large proportion of the study population. Based on our knowledge from the literature, we expected that the level of burnout would increase in the study population, despite the institution's mental hygiene and burnout prevention strategy, but our hypothesis was not confirmed. Subjects achieved the highest scores on the three subscales of the questionnaire in the emotional exhaustion subscale and the lowest scores on the depersonalization subscale in the present study. However, based on their answers to our question, 81% of respondents felt that the COVID-19 pandemic had a negative impact on their mental health.

Keywords: *Burnout syndrome, COVID-19 pandemic, mental hygiene, burnout prevention and intervention by teachers.*

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1. Introduction

Abbreviations: COVID-19 = coronavirus disease 2019, World Health Organization

1.1. Impact of the COVID-19 pandemic on mental hygiene and burnout

Burnout syndrome is a change in your relationship to work that manifests itself in clinical signs of emotional exhaustion, depersonalization, and decreased personal effectiveness. It mainly affects those who work with emotionally saturated human relationships in the course of their work, so in addition to doctors, health professionals, pastors, and social workers, it can also have a significant impact on teachers (Bordás, 2010). The neurological, mental health, and psychological consequences of the coronavirus infection and the COVID-19 pandemic have become increasingly known over the past two years, with the help of research. Already during this first wave, researchers drew attention to the fact that the epidemic has not only acute and prolonged somatic, but also mental hygiene and psychological effects, as well as an increase in the incidence of psychopathological problems and mental disorders (Galea, Merchant & Lurie, 2020; Sher, 2020). We need to focus not only on learning about indirect and direct effects, but also on how we can prepare for the prevention and effective treatment of these effects.

1.2. Acute and long-term effects of coronavirus infection

Acute psychopathological complications of viral infection include organic psycho syndromes such as various disorders of consciousness and delirium (Osváth, 2021). Accurate identification of psychopathological symptoms in the acute phase helps to predict the prognosis and develop an adequate treatment plan for the patient (Rozzini, Bianchetti, Mazzeo et al., 2020). In addition to the long-term cardiovascular and pulmonary complications of coronavirus infection, attention should also be paid to the psychological and neurological consequences (Panariello, Cellini, Speciani et al., 2020). Stress

experiences associated with infection may present at the clinical level as anxiety, depressive disorders, and post-traumatic stress disorder (Rogers, Chesney, Oliver et al., 2020). In addition, fear of infection - or infection of others - pain, symptoms, and experiences related to hospital treatment, especially intensive care unit treatment, can cause significant distress (Sher, 2020). Significant psychological distress was observed among recovered patients, especially women and the elderly. Adequate emotional regulatory function plays an important role in coping with psychological distress and thus in overall recovery (Janiri, Kotzalidis, Giuseppin et al., 2020).

1.3. Mental health effects and prevention options in the COVID-19 pandemic

The uncertainty and unpredictability of the course of the COVID-19 pandemic is a significant anxiety-increasing factor. The associated constant sense of threat increases the level of stress both on an individual level and in general (Zalsman, Stanley, Szántó, 2020). The so-called "Coronary phobia" refers to an adjustment disorder in which symptoms include sleep disturbance, dizziness, loss of appetite, and abdominal discomfort (Asmudson & Taylor, 2020). The underlying causes of psychiatric symptoms include social isolation, insecurity, fear of deteriorating existential status, and unusual changes in living conditions (Osváth, 2021). According to a study by Czeisler et al. (2020) in the United States, psychological distress is primarily caused by anxiety about an infection, fear of losing one's job, and financial problems. Risk groups for the psychological problems caused by the COVID-19 pandemic include the elderly, university students, the mentally ill, health care workers, families, and the disadvantaged living in poor conditions (Osváth, 2021).

The prevention and treatment of anxiety-depressive symptoms is aided by the acquisition and application of methods to improve emotional regulation, effective emotion management, and stress relief, such as relaxation techniques, yoga, meditation, and exercise (Taquet, Quoidbach, Fried et al. 20219. More broadly, improving the efficiency of mental health, psychiatric and addiction care systems, making crisis intervention services widely available may be a preventive strategy in a pandemic situation, but it would be essential to provide credible information on how to deal with the epidemic and to adapt to changing living conditions (Gunnel, Appleby, Arendman et al., 2020; Niederkrotenthaler, Gunnel, Arensman et al., 2020).

2. Goals

The aim of our research is to compare the burnout rate of teachers between the period immediately preceding the COVID-19 pandemic and the fourth wave of the epidemic in Hungary. The comparative study was carried out among the employees of a special public education institution - the Somogy County Pedagogical Service - as teachers. In both the previous and the current study, we used the teacher version of the Maslach Burnout Inventory (MBI, Maslach Burnout Inventory) questionnaire (MBI-ES). In the second study in December 2021, we supplemented this with a question about the impact of the pandemic on mental health.

3. Methods

3.1. Presentation of pedagogical specialist services

The task of pedagogical professional services in Hungarian public education, defined by educational management, is to contribute to the fair, high-quality, efficient, and effective operation of educational processes (Education Office, 2013). To ensure this, from birth to the end of compulsory schooling, support services are provided to clients of all ages, their parents, and teachers in nine areas of responsibility. These are: expert committee activities; special education counseling, early development and care; speech therapy care; educational consultancy; further education and career counseling; physiotherapy; conductive pedagogical care; school psychological and pre-school psychological care, and the care of highly gifted children and students (EMMI Decree 15/2013 on the operation of pedagogical professional service institutions).

3.2 Study participants

Employees of the Somogy County Pedagogical Service working as teachers participated in the study. At the time of the study, 171 people worked at the institution, 126 of whom completed the questionnaire. The youngest filler was 26 years old and the oldest 63 years old at the time of filling. There were 8 male and 118 female respondents.

3.3. Presentation of the test procedure

The survey took place in December 2021, only the staff of the Somogy County Pedagogical Service took part in it, the survey was conducted in the form of an online questionnaire. Sampling was

performed at random. All completed questionnaires could have been used in the study. Data were recorded in a Microsoft Excel spreadsheet, and these spreadsheets were used for analysis.

The ***teacher's version of Maslach's Burnout Questionnaire*** (MBI-Educator's Survey) was used in the study. The questionnaire consisted of 22 items, each scored between 0 and 6 points, depending on how often the respondent felt the statements (0: never - 6: every day). The questions of the questionnaire can be divided into three subscales: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. The clinical questionnaire was supplemented by two questions in which we sought to answer the extent and direction of the COVID-19 pandemic in the mental health status of the respondents.

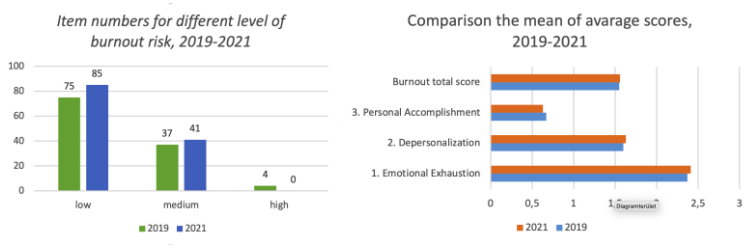
3.4. Research questions

1) Did the burnout level of the teachers of the Somogy County Pedagogical Service change during the COVID-19 pandemic? 2) Did the mean value of the emotional exhaustion subscale increase during the COVID-19 pandemic? 3) Does age affect the burnout level of teachers in the Somogy County Pedagogical Service in the 2021 study? 4) Did the COVID-19 pandemic affect mental health of the teachers of the Somogy County Pedagogical Service?

4. Results

The descriptive statistics of the obtained data is representative for the staff of the Somogy County Pedagogical Service. The 126 randomly selected individuals represent 73.68 percent of the study population. Upon evaluating the questionnaire, the results are classified into three categories based on the obtained total scores: low, medium, high risk of burnout/involvement. A comparison: burnout (left) and mean scores (right), in 2019 vs in 2021 is shown in Figure 1:

Figure 1. Different levels of burnout risk (2019 vs 2021) and average scores.

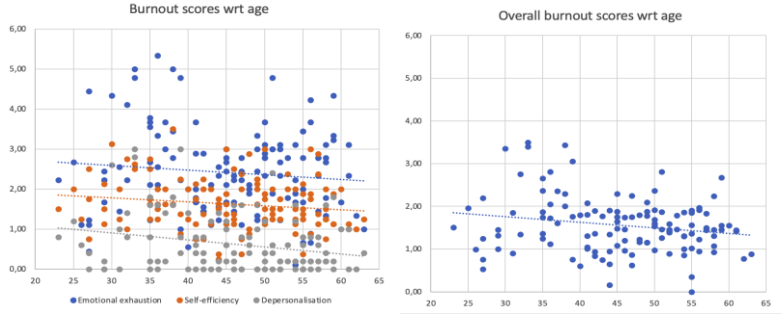


Thus, the answer to our first researcher's question is that the level of burnout of the teachers of the Somogy County Pedagogical Service did not change between the pre-COVID-19 pandemic period and the present-day pandemic period.

In response to the second researcher question, we conclude that the mean value of the emotional exhaustion subscale did not increase significantly during the COVID-19 pandemic.

Looking for the answer to our third research question – about examining the respondents' scores on the subscales in relation to their age - we concluded that age does not affect the level of burnout in any of the subscales and in the whole questionnaire: contrary to expectations, the result even improved slightly with age. The results can be seen in Figure 2:

Figure 2. Burnout values vs. age (subscales – left, overall – right).

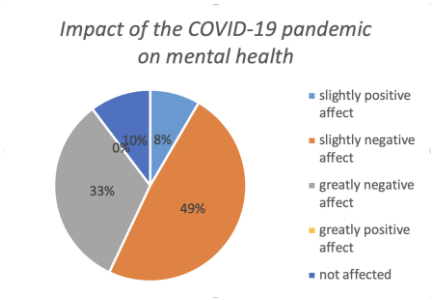


Analyzing the answers to the questionnaire in detail, we found that the highest mean value was measured in the following two questions of the Emotional Exhaustion subscale.

1. By the end of the day, I feel exhausted.
2. I feel like I work too hard.

Interestingly, according to the two supplementary questions, their (subjective overall) judgement is different. Corresponding to our fourth research question, the COVID-19 pandemic had a small negative effect on the mental hygiene in 49%, a large negative effect in 33%, small positive improvement in 8%, and no change in 10%. The results are shown in Figure 5.

Figure 3. Impact of the COVID-19 pandemic on mental health.



5. Conclusions

In our research, we compared between October 2019 and December 2021 the level of burnout of teachers of the Somogy County Pedagogical Service. During this period, an unexpected crisis, the COVID-19 pandemic, arose around the world. Based on the literature reviewed and our hypotheses, we also expected that the level of burnout in the institution would increase because of the pandemic. However, based on the responses to the Teacher Version of the Maslach Burnout Questionnaire, our study results have shown that the level of burnout did not change significantly, neither in the full questionnaire nor in the subscales. The level of burnout has not changed significantly with age either, it even decreased slightly in the case of older colleagues. In our supplementary question to the Maslach questionnaire, to assess the subjective extent and direction of their mental health status affected by the COVID-19 pandemic, 82% of respondents reported a negative change, only 10% reported slight improvement, and 8% felt being unaffected by the pandemic. In our view, the slight discrepancy between the results of the main questionnaire and the supplementary questionnaire indicates that, although working conditions have deteriorated significantly over the past two years, the level of burnout has not changed and has remained low in the institution, however, the private effects of the pandemic, the difficulties and losses within family significantly affects the subjectively judged mental health status of the employees. Therefore, the current institutional strategy should not focus on the psychoeducation of burnout, but on trauma processing, emotional support, and the reduction of anxiety.

From 2020, we launched an institutional mental health program at the Somogy County Pedagogical Service. As a part of this, lectures and workshops included psychoeducation about burnout syndrome to raise awareness of the symptoms of burnout and to help colleagues self-reflect on their own possible burnout. The program is ongoing. In addition, we organized individual counseling and, if necessary, therapeutic support for the employees, and we also launched autogenic training relaxation groups. The management of the institution gives special support to the programs of the member institutions and the whole institution with the intention of team building. Due to the impact of the COVID-19 pandemic on mental health, we will continue to prioritize further support for the latter in our mental health program in the coming period.

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References

15/2013. EMMI Decree on the Operation of Educational Service Centers. in Hungarian: 15/2013. EMMI rendelet a pedagógiai szakszolgálati intézmények működéséről. Retrieved May 23, 2021, from: https://net.jogtar.hu/j ogszabaly?docid=a1300015.emm

Asmundson GJ, Taylor S. (2020). Coronaphobia: fear and the 2019- nCoV outbreak. *Journal of Anxiety Disorders, 70. (March 2020)*, 102196. Retrieved 01.12.2022., from: https://www.sciencedirect.com/science/article/pii/S0887618520300104?via%3Dihub

Bordás A. (2010). Burnout syndrome in foreing and domestic literature. In Hungarian: A kiégés-szindróma a külföldi és a hazai szakirodalomban. *Educatio. 19. (4).* 666-672. Retrieved 01.20.2022., from: http://epa.niif.hu/01500/01551/00054/pdf/educatio_EPA01551_2010-4_Kutkozben3.pdf

Czeisler MÉ, Lane RI, Petrosky E, et al. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 pandemic: United States, June 24–30, *Morbidity and Mortality Weekly Report. 69 (32)*. 1049–1057. Retrieved 01.22.2022., from: https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm

Galea S, Merchant RM, Lurie N. (2020). The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention. *JAMA Internal Medicine. 180. (6).* 817–818. Retrieved 01.12.2022., from: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2764404

Ge F, Wan M, Zheng A, et al. (2020). How to deal with the negative psychological impact of COVID-19 for people who pay attention to anxiety and depression. *Precision Clinical Medicine. 3*(3). 161– 168. Retrieved 01.13.2022., from: https://academic.oup.com/pcm/article/3/3/161/5861360

Gunnell D, Appleby L, Arensman E, et al. (2020). COVID-19 suicide prevention research collaboration. Suicide risk and prevention during the COVID-19 pandemic. *The Lancet Psychiatry 7*(6). 468–471. Retrieved 01.13.2022., from: https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30171-1/fulltext

Janiri D, Kotzalidis GD, Giuseppin G, et al. (2020). Psychological distress after COVID-19 recovery: reciprocal effects with temperament and emotional dysregulation. An exploratory study of patients over 60 years of age assessed in a post-acute care service. *Frontiers in Psychiatry 11*. 590135. Retrieved 01.22.2022., from: https://www.frontiersin.org/articles/10.3389/fpsyt.2020.590135/full

Mion G., Hamman P., Saleten M., Plaud B., Baillard C. (2021). Psychological impact of the COVID-19 pandemic and burnout severity in French residents:A national study. The Europian Journal of Psychiatry. 35. 173-180. Retrieved 01.17.2022., from: https://www.elsevier.es/en-revista-european-journal-psychiatry-431-pdf-S0213616321000203

Niederkrotenthaler T, Gunnell D, Arensman E, et al. (2020). International COVID-19 Suicide Prevention Research Collaboration. Suicide research, prevention, and COVID-19. *Crisis 41. (5).* 321–330. Retrieved 01.21.2022., from: https://econtent.hogrefe.com/doi/10.1027/0227-5910/a000731

Oktatási Hivatal (2013). *Megújul a szakszolgálati rendszer.* Retrieved 12.25.2021., from: https://www.oktatas.hu/kozneveles/projektek/tamop3110_oktatasiranyitas/projekthirek/megujul_szakszolgalati_rendszer

Osváth P. (2021). Psychological Outcome of COVID-19 Pandemic. How can we prepare for a psychdemic crisis? In Hungarian: A COVID-19 pandémia mentálhigiénés következményei. Hogyan tudunk felkészülni a pszichodémiás krízisre? *Orvosi Hetilap. 162. (10.)* 366-372. Retrieved 01.14.2022., from: https://akjournals.com/view/journals/650/162/10/article-p366.xml

Panariello F, Cellini L, Speciani M, et al. (2020). How does SARSCOV-2 affect the central nervous system? A working hypothesis. *Frontiers in Psychiatry 11*. 582345. Retrieved 01.19.2022., from: https://www.frontiersin.org/articles/10.3389/fpsyt.2020.582345/full

Rogers JP, Chesney E, Oliver D, et al. (2020). Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: a systematic review and meta-analysis with comparison to the COVID-19 pandemic. *The Lancet Psychiatry 7*(7). 611–627. Retrieved 01.19.2022., from: https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30203-0/fulltext

Rozzini R, Bianchetti A, Mazzeo F, et al. (2020). Delirium: clinical presentation and outcomes in older COVID-19 patients. *Frontiers in Psychiatry 11*. 586686. Retrieved 01.20.2022., from: https://www.frontiersin.org/articles/10.3389/fpsyt.2020.586686/full

Sher L. (2020). The impact of the COVID-19 pandemic on suicide rates. *QJM: An International Journal of Medicine 113* (10). 707–712. Retrieved 01.20.2022., from: https://academic.oup.com/qjmed/article/113/10/707/5857612?login=true

Taquet M, Quoidbach J, Fried EI, et al. (2021). Mood homeostasis before and during the coronavirus disease 2019 (COVID-19) lockdown among students in the Netherlands. *JAMA Psychiatry 78. (1).* 110–112. Retrieved 01.19.2022., from: https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2768363

Zalsman G, Stanley B, Szántó K, et al. (2020). Suicide in the time of COVID-19: review and recommendations. *Archives of Suicide Research. 24. (4).* 477–482. Retrieved 01.22.2022., from: https://www.tandfonline.com/doi/full/10.1080/13811118.2020.1830242