


Investigating Fear of Covid-19, Social Distance and Burnout Among Health and Education Professionals Working in Special Education and Rehabilitation Centers


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ABSTRACT	
<p>Corresponding Author Turgay ALTUNALAN</p> <p>DOI https://10.48121/jihsam.1457955</p> <p>Received 26.03.2024</p> <p>Accepted 23.10.2024</p> <p>Published Online 31.10.2024</p> <p>Key Words COVID-19, Fear of Covid-19, Social Distancing, Burnout, Special Education and Rehabilitation Centers</p> <p><i>This study was presented orally at the 8th International Congress of Health Sciences and Management on May 3-5.</i></p>	<p>Special Education and Rehabilitation Centres (SERCs) are rare institutions where health and education professionals work together. This study aims to investigate fear of Covid-19, attention to social distance, and occupational burnout among health and education professionals working in the SERCs during the pandemic. Our study group consisted of 150 professionals, 97 of whom graduated from the health science faculty and 53 from the education faculty, all employed at 17 different SERCs in Turkey between July and November 2021. The Covid-19 Fear Scale was used to measure Covid-19 fear, the Social Distancing Scale for social distance attention, and the Maslach Burnout Scale for occupational burnout. Both groups showed similar Covid-19 fear frequencies of 84.9% for health professionals and 83.5% for education professionals. Health professionals significantly ($p=0.027$) paid more attention to social distancing. Healthcare professions have significantly better scores for total occupational burnout, emotional exhaustion, and depersonalization. There was a significant positive moderate relationship between the fear of Covid-19, emotional exhaustion ($p<0.000$, $r=.423$), and depersonalization ($p<0.000$, $r=.547$). There was a significant positive, very weak relationship between the attention to social distancing and depersonalization ($p=0.005$, $r=.229$). Fear of Covid-19 and occupational burnout among health and education professionals working in SERCs are similar and as common as among frontline health workers in a hospital. SERCs can be considered as priority institutions where protection support should be provided during a pandemic.</p>


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1. INTRODUCTION

Humanity has faced numerous epidemic diseases throughout history. One of these epidemics is Covid-19, which originated in Wuhan. As the virus rapidly started to spread, it was declared a pandemic. The coronavirus can affect individuals in a wide range, from respiratory symptoms, fatigue, and pain to death (Hartavi & Çelikay Söyler, 2022). Various rules and changes have been implemented in social and work environments to manage the pandemic better and minimize the risk of spreading infection. The measures implemented to mitigate the spread of the virus include the temporary suspension of educational activities, travel restrictions, curfews, the adherence to social distancing protocols in enclosed spaces, and the use of face masks (Islam et al., 2020).

One of the measures taken to prevent the spread of the Covid-19 pandemic is the implementation of social distancing. Social distancing refers to maintaining an adequate space between individuals in the event of a disease, also known as physical/social distance. By reducing physical proximity and minimizing contact, social distancing helps prevent the transmission of respiratory diseases from one individual to another (Ahmed et al., 2018). Numerous studies have found that implementing social distancing measures mitigates the outbreak's severity and reduces the spread of the disease to other regions (Murphy et al., 2023). While social distancing is an effective method of reducing the spread of the virus, the changes in living habits and behaviour that it entails also have the potential to cause adverse effects (Maresca et al., 2022). These adverse effects include reduced physical activity and exposure to sunlight, increased weight gain, and a deterioration in sleep quality (Liu et al., 2024). Maintaining these changes in lifestyle and behavioural patterns represents a contributory factor in developing occupational burnout (Czeisler et al., 2023).

A significant number of people developed a fear of contracting the virus, commonly referred to as 'fear of Covid-19', due to the high mortality rates associated with the disease. Fear of Covid-19 is a newly coined term to describe the psychological impact that may be related to the fear of the pandemic's uncertainty, lack of trust in available resources, and fear of contracting the virus (Alimoradi et al., 2022). The fear of transmitting the virus to loved ones can lead to severe fear and anxiety, accompanied by avoidance behaviors (Firouzkouhi et al., 2023). The prevalence of Covid-19's fear in healthcare workers and teachers varies between 27 and 54% (Abdelghani et al., 2021; Labrague & De Los Santos, 2021; Moretti et al., 2022). Fear of Covid-19 is associated with numerous mental disorders, including anxiety symptoms, burnout, combined psychological symptoms, depressive symptoms, adverse mental health, anxiety-related symptoms, insomnia or sleep disturbance, low general

well-being, low quality of life, obsessive-compulsive symptoms, phobias, post-traumatic stress, psychological distress, somatisation, and suicidal thoughts/ideation (Dragiotti et al., 2022; Ishaky et al., 2023). These factors may contribute to occupational burnout, mediated by fear of Covid-19 (Enea et al., 2022).

Occupational burnout is a mental condition that develops in response to negative conditions at work and is characterised by emotional exhaustion, a sense of helplessness, depersonalisation, a negative attitude to work and life, and low personal accomplishment (Maslach & Jackson, 1981). The health and teaching professions (Göransson et al., 2017) have a high workload and challenging working conditions (Benigno et al., 2024). During the pandemic, elevated mortality risk heightens the probability of burnout, hopelessness, and mental health issues among those employed in these roles (Karagöl & Törenli Kaya, 2022). In a meta-analysis of studies from different continents, teachers showed higher burnout levels during Covid-19 (Ozamiz-Etxebarria et al., 2023). Another meta-analytic study of medical nurses reported a prevalence of 31% for emotional exhaustion (EE), 24% for depersonalization (DP), and 38% for the lower personal accomplishment (LPA) dimension of burnout (Molina-Praena et al., 2018).

In the current literature, some studies investigated 'fear of Covid-19 among health workers and teachers (İpek Dongaz et al., 2023). However, few studies have investigated social distancing, fear of Covid-19, and occupational burnout among health and education professionals in Special Education and Rehabilitation Centres (SERCs). The first aim of this study is to compare levels of fear of Covid-19, adherence to social distancing, and burnout among health and education professionals working at SERCs during the pandemic. The second aim of this study is to examine the correlation between these parameters.

2. MATERIALS AND METHOD

Research model

Our study uses a descriptive cross-sectional methodology. The Non-Interventional Research Ethics Committee of Uskudar University granted ethical approval for the study, with the reference number 61351342/MAY 2021-74.

Research population and sample

The population of this study consists of healthcare and education professionals working in private SERCs in Turkey from July to November 2021 (the pandemic period). The study includes psychologists, child development specialists, physiotherapists, preschool teachers, special education teachers, speech and language therapists, and audiologists employed in these centres. Exclusion criteria included a positive COVID-

19 test result within the previous six months, seeking psychiatric care within the same period, and absences from work exceeding one month within the preceding six months.

Approximately 25,000 professionals in 3277 SERCs in Turkey constitute the population of the study. The participants were invited to participate in the study via social media and professional groups. A total of 17 SERCs accepted the invitation and permit to data collection. These centres employ 204 professionals, 150 of whom participated in the study, representing a response rate of 74%. The study cohort comprised 26 physiotherapists, 18 psychologists, 20 child development specialists, 16 occupational therapists, 17 special education teachers, 18 preschool educators, 18 audiologists, and 17 speech-language therapists. None of the participants were excluded from the study.

Data collection tools in the research

The researchers created digital scale forms and uploaded them to the Google Forms database. The participants were instructed to complete the forms using mobile phone applications, including WhatsApp and Bip. The participants were presented with an online informed consent form and were required to indicate their acceptance by checking the consent box. Following the acquisition of approval via the informed consent form, participants completed the demographic information form and the scales.

Demographic Information Form: A total of 5 demographic characteristics were recorded: age, gender, occupation, experience, salary satisfaction, and whether they felt pandemic preparedness was adequate.

Fear of COVID-19 Scale: The scale was developed by Ahorsu et al. (2022) to assess the level of fear related to Covid-19. The Turkish validity and reliability of the scale were conducted by Artan et al. (2021). Cronbach's alpha reliability coefficient of the Turkish version of the scale is 0.86. The scale consists of 7 items, all of which have a positive question structure. Responses are recorded on a 5-point Likert scale, where 1 point indicates "strongly disagree" and 5 points indicate "strongly agree." The total score from the scale ranges from 7 to 35. A higher score indicates a 'high' level of Covid fear. A diagnosis of fear of Covid-19 was proposed to be made when the subject scores 16.5 or above on the relevant test (Aljemaiah et al., 2022). In the present study, Cronbach's alpha internal consistency was found to be 0.94.

Social Distance Scale: The Social Distance Scale was developed by Van Rooij et al. (2020) (Van Rooij et al., 2020). The validity and reliability of this scale were conducted by Oral and Gunlu in 2021 (Oral & Gunlu, 2022). Cronbach's alpha reliability coefficient of the Turkish version of the scale is 0.70. The scale consists of a total of 4 items. Responses are collected using a 5-point Likert scale, including "always," "often," "sometimes," "occasionally," and "never" expressions.

Each item receives a score between 1 and 5. The scale's 1st, 3rd, and 4th items have a negative question structure. The total score on the scale ranges from 4 to 20. A higher score indicates that the participant pays attention to social distancing and adheres to social distance rules. In the present study, Cronbach's alpha internal consistency was found to be 0.84.

Maslach Burnout Inventory: The scale was developed by Maslach and Jackson in 1981 (Maslach & Jackson, 1981). It comprises three sub-dimensions and 22 items: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion represents emptiness, hopelessness, dissatisfaction, and loss of enthusiasm. Depersonalization indicates the loss of empathy and enthusiasm towards others. Reduced personal accomplishment signifies negative feelings towards oneself. The data related to the sub-dimension of reduced personal accomplishment are in the form of negative questions. The scale is a 7-point Likert scale, but Ergin (1992) adapted it to Turkish as a 5-point Likert scale. The Cronbach's alpha internal consistency value for emotional exhaustion, depersonalization, and reduced personal accomplishment was 0.83, 0.65, and 0.72, respectively. Evaluation criteria for each item are defined as "never, very rarely, sometimes, often, and always" (Ergin, 1992). In the present study, Cronbach's alpha internal consistency was found to be 0.75.

Statistical analysis

Sampling analysis using G*Power (3.1) indicated that at least 140 participants should be recruited for a margin of error of 0.05, 80% power, with a medium effect size for comparing fear of Covid-19 between education and health sciences. Considering the 10% case loss, 150 participants were included in the study. SPSS 24.0 (Statistical Package for the Social Sciences) Package program was used for statistical analysis. The normal distribution of the data was tested by Shapiro-Wilk and histogram evaluations. Since our data did not fit the normal distribution, non-parametric tests were used. Demographic variables were reported as frequencies, percentages, median, and interquartile. Fear of Covid-19 and attention to social distancing in health and education professionals were compared using the Mann-Whitney U test. The relationship between fear of Covid-19, attention to social distancing, and burnout was analyzed using Spearman correlation analysis. The strength of the correlations was considered to be no correlation or very weak, weak, moderate, strong, and very strong if the Spearman's correlation coefficients were 0-0.19, 0.2-0.39, 0.40-0.69, 0.70-0.89, and 0.90-1.00, respectively. The statistical significance level was accepted as $p < 0.05$.

3. RESULTS

A total of 150 participants participated in the study, including 97 health sciences professionals and 53 education professionals working in SERCs across various provinces in Turkey. The median age was 27 years old in both groups. Most participants had five years of experience or less. The analysis showed that burnout levels were significantly higher ($p=0.013$) among education professionals than health science professionals. Healthcare professionals reported significantly higher ($p=0.006$) satisfaction with their

salaries. Both groups of respondents believed the measures to address the pandemic were inadequate. Descriptive information about the participants is presented in Table 1.

Table 1. Demographic Characteristics of Participants

	Health Science Professionals n:97 M [Q1-Q3]	Education or Social Sciences Professionals n:53 M [Q1-Q3]	p
Age (year)	27 [25-28]	27 [25-28]	.824 ^a
Gender	Male	43 (44.3%)	.236 ^b
	Female	54 (55.7%)	
Experience	0-5 year	89 (91.8%)	.567 ^b
	6-10 year	6 (6.2%)	
	11 and more	2 (2.1%)	
Salary satisfaction	Yes	16 (16.5%)	.006 ^{b*}
	No	81 (83.5)	
Considering pandemic precautions sufficient	Yes	9 (9.3%)	.541
	No	88 (90.7%)	

a: Mann Whitney U, b: chi-chare, *: $p<0.05$, M: Medyan.

There was no significant difference in fear of Covid-19 between participants in both groups. Both groups showed similar Covid-19 fear frequencies of 84.9% for health professionals and 83.5% for education professionals. Health professionals significantly ($p=0.027$) paid more attention to social distancing. Healthcare professions have better scores for total occupational burnout, emotional exhaustion, and depersonalisation than education professions (Table 2).

Table 2. Comparison of health and education sciences professionals' levels of fear of Covid-19 attention to and social distance

	Health Science n:97 M [Q1-Q3]	Education or Social Sciences n:53 M [Q1-Q3]	p
Fear of Covid-19	27 [20-28]	28 [24-31]	.397 ^a
Social Distancing	11 [10-13]	10 [10-12]	.027 ^{a*}
Burnout	81 [67-86]	85 [77-89]	.013 ^{a*}
Emotional exhaustion	35 [27-37]	36 [33-39]	.020 ^{a*}
Depersonalization	17 [11-19]	19 [16.5-20]	.007 ^{a*}
Personal accomplishment	30 [28-32]	29 [28-32]	.518

a: Mann Whitney U, $p<0.05$, M: Median, Q1: First Quartile, Q3: Third Quartile

There was a significant positive moderate relationship between the total burnout score ($p<0.000$, $r=.500$), the

subcategories of emotional exhaustion ($p<0.000$, $r=.423$), depersonalization ($p<0.000$, $r=.547$), and the level of fear of Covid-19. There was a significant positive, very weak relationship between the

subcategory of depersonalization ($p=0.005$, $r=.229$) and attention to social distancing (Table 3).

Tablo 3: The relationship between fear of Covid-19, attention to social distance, and professional burnout

	Fear of Covid-19		Social Distance	
	p^a	r	p^a	r
Fear of Covid-19	-	-	.153	.117
Burnout	.000**	.500	.093	-.138
Emotional exhaustion	.000**	.423	.383	.072
Depersonalization	.000**	.547	.005*	.229
Personal accomplishment	.332	-.080	.063	.152

a: Spearman Correlation Analyses

4. DISCUSSION

We aimed to compare the levels of fear of Covid-19, attention to social distancing, and occupational burnout among health and education professionals working in SERCs during the pandemic. Our study results revealed no significant difference in fear of Covid-19 between health professionals and education professionals and showed that health professionals paid more attention to social distancing than education professionals. Health professionals' total burnout, emotional exhaustion, and depersonalization levels were significantly lower than education professionals. There was a significant positive moderate relationship between the total burnout score, the subcategories of emotional exhaustion, depersonalization, and the fear of Covid-19.

Our study showed educators and health workers have similar COVID-19 fears in SERCs. This similarity can be explained by the fact that both groups work in close physical contact with children with special needs. In addition, both groups work with the children for long periods, e.g. 45 minutes per session. Both groups working in SERCs are at risk of viral infection because they involve touching and close contact with patients (Sönmez & Çağlayan, 2022). Additionally, both groups have continued to provide rehabilitation services and have been given extra responsibilities, such as ensuring social distancing of children with disabilities and maintaining hygiene standards within the service throughout the pandemic. Interestingly, SERC professionals show a high fear of Covid-19, as high as frontline health workers in a hospital (Yılmaz et al., 2021). Numerous studies have shown that frontline workers experience adverse conditions during the pandemic (Altunalan et al., 2022; Yılmaz et al., 2021), but SERC workers feel forgotten compared to other health workers during the pandemic (Ishaky et al., 2023). These findings suggest that service providers should consider protective measures, including decreasing working hours (Duong et al., 2022) and providing protective equipment (Romeu-Labayen et al., 2022) for SERCs workers during a pandemic.

Our study showed that health professionals pay more attention to social distancing than education professionals. Several factors may influence attention to social distancing, including gender, age, education level, and working hours (Ayaslier et al., 2023; Tekkas Kerman et al., 2022). Attention to social distancing is an important parameter of Covid-19 preventive behaviours associated with occupational burnout (Czeisler et al., 2023). Our results aligned with the literature (Islam et al., 2020); our study showed a positive moderate relationship between the levels of attention to social distancing and depersonalization among health and education professionals working in SERCs. The relationship between social distancing and depersonalisation can be explained by decreasing social relationships. Social (or, more accurately, physical) distance is modeled by the reduced number of attempts an agent makes to find someone to talk to (Fontanari, 2021). This model considers the quality of social interaction, defined as the rate at which the level of loneliness decreases during a social interaction. The number, quality, or duration of social relationships leads individuals to a pattern of burnout in which the agents' feelings of loneliness are heightened.

Our study results showed that levels of occupational burnout were similar between education and health workers. Additionally, both groups showed high adverse scores in three subheadings of Maslach. Covid-19 has been associated with an increased prevalence of burnout syndrome. This phenomenon has been observed in individuals experiencing a range of emotional states, including anxiety, fear of infection, and fear of infecting their relatives. Our emotional exhaustion, depersonalization, and personal accomplishment scores are worse than before (Tarakcı et al., 2012) and after (Erdoğan et al., 2023) Covid-19 in SERCs' workers. Furthermore, the burnout score in our study is worse than those reported in previous studies conducted on physiotherapists during the pandemic period (Şenocak et al., 2023). Our research showed a moderate correlation between fear of Covid-19 and the experience of emotional exhaustion and depersonalisation, which is in line with the literature (Padmanabhanunni & Pretorius, 2023).

A strong aspect of our study is that it is the first to compare fear of Covid-19 and social distancing levels in SERCs to the best of our knowledge. Our study has some limitations. One is that we did not assess health literacy; this is a potential factor for attention to social distancing and fear of Covid-19. Although our participant count is sufficient for our current hypothesis, it is inadequate for forming subgroups according to mediator variables.

5. CONCLUSION AND RECOMMENDATIONS

This study showed that education and health professionals had similar fears of Covid-19 behaviour, and occupational burnout. However, education had worse social distancing score. Fear of Covid-19 among SERC workers was as common as among frontline health workers in a hospital. There was a significant positive, moderate relationship between fear of Covid-19, emotional exhaustion, and depersonalisation, and a significant positive, very weak relationship between attention to social distancing and depersonalisation.

Further studies should be conducted on larger populations to include potential mediators such as health literacy.

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No

Conflict of Interest:

The authors declare that they have no conflict of interest.

Ethical Approval:

The study received ethical approval from the Non-Interventional Research Ethics Committee of Uskudar University, with the reference number 61351342/MAY 2021-74.

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REFERENCES

- Abdelghani, M., Hassan, M. S., Elgohary, H. M., & Fouad, E. (2021). Exploring the factors associated with coronaphobia among physicians during the COVID-19 outbreak in Egypt. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, 57(1), 105. <https://doi.org/10.1186/s41983-021-00357-6>
- Ahmed, F., Zviedrite, N., & Uzicanin, A. (2018). Effectiveness of workplace social distancing measures in reducing influenza transmission: A systematic review. *BMC Public Health*, 18(1), 518. <https://doi.org/10.1186/s12889-018-5446-1>
- Ahorsu, D. K., Lin, C.-Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2022). The Fear of COVID-19 Scale: Development and Initial Validation. *International Journal of Mental Health and Addiction*, 20(3), 1537–1545. <https://doi.org/10.1007/s11469-020-00270-8>
- Alimoradi, Z., Ohayon, M. M., Griffiths, M. D., Lin, C.-Y., & Pakpour, A. H. (2022). Fear of COVID-19 and its association with mental health-related factors: Systematic review and meta-analysis. *BJPsych Open*, 8(2), e73. <https://doi.org/10.1192/bjo.2022.26>
- Aljemaiah, A. I., Alyami, A. A., Alotaibi, F. S., & Osman, M. (2022). The prevalence of coronaphobia among nursing staff in Saudi Arabia. *Journal of Family Medicine and Primary Care*, 11(4), 1288–1291. https://doi.org/10.4103/jfmpc.jfmpc_1412_21
- Altunalan, T., Demirci, D., Gül, S., & Öztel, A. (2022). The Investigation of musculoskeletal disorders, sleep quality, and fatigue of frontline healthcare workers during the COVID-19. *International Journal of Disabilities Sports and Health Sciences*, 5(2), 143–149. <https://doi.org/10.33438/ijdshs.1174653>
- Artan, T., Meydan, S., & Irmak, S. (2021). Turkish Version of the Fear of COVID-19 Scale: Validity and Reliability Study. *Archives of Health Science and Research*, 8(2), 117–123. <https://doi.org/10.5152/ArcHealthSciRes.2021.20113>
- Ayashier, A. A., Albayrak, B., Çelik, E., Özdemir, Ö., Özgür, Ö., Kırmlı, E., Kayı, İ., & Sakarya, S. (2023). Burnout in primary healthcare physicians and nurses in Turkey during COVID-19 pandemic. *Primary Health Care Research & Development*, 24, e4. <https://doi.org/10.1017/S146342362200069X>
- Benigno, V., Usai, F., Mutta, E. D., Ferlino, L., & Passarelli, M. (2024). Burnout among special education teachers: Exploring the interplay between individual and contextual factors. *European Journal of Special Needs Education*, 1–19. <https://doi.org/10.1080/08856257.2024.2351702>
- Czeisler, M. E., Wolkow, A. P., Czeisler, C. A., Howard, M. E., Rajaratnam, S. M. W., & Lane, R. I. (2023). Association between burnout and adherence with mask usage and additional COVID-19 prevention behaviours: Findings from a large-scale, demographically representative survey of US adults. *BMJ Open*, 13(3), e066226. <https://doi.org/10.1136/bmjopen-2022-066226>
- Dragioti, E., Tsartalis, D., Mentis, M., Mantzoukas, S., & Gouva, M. (2022). Impact of the COVID-19 pandemic on the mental health of hospital staff: An umbrella review of 44 meta-analyses. *International Journal of Nursing Studies*, 131, 104272. <https://doi.org/10.1016/j.ijnurstu.2022.104272>
- Duong, T. V., Nguyen, M. H., Lai, C.-F., Chen, S.-C., Dadaczynski, K., Okan, O., & Lin, C.-Y. (2022). COVID-19-related fear, stress and depression in school principals: Impacts of symptoms like COVID-19, information confusion, health-related activity limitations, working hours, sense of coherence and health literacy. *Annals of Medicine*, 54(1), 2064–2077. <https://doi.org/10.1080/07853890.2022.2101688>
- Enea, V., Candel, O. S., Zancu, S. A., Scrumeda, A., Bărbuşelu, M., Lărgu, A. M., & Manciu, C. (2022). Death anxiety and burnout in intensive care unit specialists facing the COVID-19 outbreak: The mediating role of obsession with COVID-19 and coronaphobia. *Death Studies*, 46(10), 2306–2315. <https://doi.org/10.1080/07481187.2021.1928331>
- Erdoğan, M., Saka, G., & Arca, M. (2023). Burnout levels of employees in special education and rehabilitation centers. *ESTUDAM Public Health Journal*, 8(1), 31–41. <https://doi.org/10.35232/estudamhsd.1143028>
- Ergin, C. (1992). *Doktor ve Hemşirelerde Tükenmişlik ve Maslach Tükenmişlik Ölçeğinin Uyarlanması*. VII. Ulusal Psikoloji Kongresi, Ankara (Turkey).

- Firouzkouhi, M., Alimohammadi, N., Abdollahimohammad, A., Bagheri, G., & Farzi, J. (2023). Bereaved Families Views on the Death of Loved Ones Due to COVID 19: An Integrative Review. *Omega*, 88(1), 4–19. <https://doi.org/10.1177/00302228211038206>
- Fontanari, J. F. (2021). A stochastic model for the influence of social distancing on loneliness. *Physica A*, 584, 126367. <https://doi.org/10.1016/j.physa.2021.126367>
- Göransson, K., Lindqvist, G., Möllås, G., Almqvist, L., & Nilholm, C. (2017). Ideas about occupational roles and inclusive practices among special needs educators and support teachers in Sweden. *Educational Review*, 69(4), 490–505. <https://doi.org/10.1080/00131911.2016.1237477>
- Hartavi, S., & Çelikay Söyler, H. (2022). COVID-19 Pandemi Sürecinde Birinci Basamak Sağlık Çalışanlarında Psikolojik Sıkıntı, Tükenmişlik ve Hijyen Davranışlarının İncelenmesi Investigation of Psychological Distress, Burnout and Hygiene Behaviors in Primary Health Workers During The COVID-19 Pandemia Process. *Türk Turizm Arastirmalari Dergisi*, 5. <https://doi.org/10.26677/TR1010.2022.1119>
- İpek Dongaz, Ö., Özen Oruk, D., Güp, A. A., Koç, M., Bayar, B., & Bayar, K. (2023). Coronaphobia among healthcare professionals and its associations with sleep quality, physical activity, and fatigue in Turkey. *International Journal of Healthcare Management*, 1–7. <https://doi.org/10.1080/20479700.2023.2210392>
- Ishaky, L., Sivanthan, M., Nowrouzi-Kia, B., Papadopoulos, A., & Gohar, B. (2023). The mental health of laboratory and rehabilitation specialists during COVID-19: A rapid review. *AIMS Public Health*, 10(1), 63–77. <https://doi.org/10.3934/publichealth.2023006>
- Islam, N., Sharp, S. J., Chowell, G., Shabnam, S., Kawachi, I., Lacey, B., Massaro, J. M., D'Agostino, R. B., & White, M. (2020). Physical distancing interventions and incidence of coronavirus disease 2019: Natural experiment in 149 countries. *BMJ (Clinical Research Ed.)*, 370, m2743. <https://doi.org/10.1136/bmj.m2743>
- Karagöl, A., & Törenli Kaya, Z. (2022). Healthcare workers' burnout, hopelessness, fear of COVID-19 and perceived social support levels. *The European Journal of Psychiatry*, 36(3), 200–206. <https://doi.org/10.1016/j.ejpsy.2022.01.001>
- Labrague, L. J., & De Los Santos, J. A. A. (2021). Prevalence and predictors of coronaphobia among frontline hospital and public health nurses. *Public Health Nursing*, 38(3), 382–389. <https://doi.org/10.1111/phn.12841>
- Liu, J., Ouyang, N., Mizrahi, A., & Kornides, M. L. (2024). Social Distancing in the COVID-19 Pandemic: Associated Factors, Health Outcomes, and Implications. *Family & Community Health*, 47(1), 80–94. <https://doi.org/10.1097/FCH.0000000000000367>
- Maresca, G., Corallo, F., Catanese, G., Formica, C., & Lo Buono, V. (2022). Coping Strategies of Healthcare Professionals with Burnout Syndrome: A Systematic Review. *Medicina (Kaunas, Lithuania)*, 58(2), 327. <https://doi.org/10.3390/medicina58020327>
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Molina-Praena, J., Ramirez-Baena, L., Gómez-Urquiza, J. L., Cañadas, G. R., De La Fuente, E. I., & Cañadas-De La Fuente, G. A. (2018). Levels of Burnout and Risk Factors in Medical Area Nurses: A Meta-Analytic Study. *International Journal of Environmental Research and Public Health*, 15(12), 2800. <https://doi.org/10.3390/ijerph15122800>
- Moretti, M., De Geyter, D., Van Cutsem, E., Van Laere, S., Pierard, D., & Allard, S. D. (2022). Fear for CoViD-19 and reluctance to work among health care workers during the epidemic, a prospective monocentric cohort study. *American Journal of Infection Control*, 50(3), 312–318. <https://doi.org/10.1016/j.ajic.2021.10.042>
- Murphy, C., Lim, W. W., Mills, C., Wong, J. Y., Chen, D., Xie, Y., Li, M., Gould, S., Xin, H., Cheung, J. K., Bhatt, S., Cowling, B. J., & Donnelly, C. A. (2023). Effectiveness of social distancing measures and lockdowns for reducing transmission of COVID-19 in non-healthcare, community-based settings. *Philosophical Transactions. Series A, Mathematical, Physical, and Engineering Sciences*, 381(2257), 20230132. <https://doi.org/10.1098/rsta.2023.0132>
- Oral, T., & Gunlu, A. (2022). Adaptation of the Social Distancing Scale in the Covid-19 Era: Its Association with Depression, Anxiety, Stress, and Resilience in Turkey. *International Journal of Mental Health and Addiction*, 20(3), 1336–1353. <https://doi.org/10.1007/s11469-020-00447-1>
- Ozamaz-Etxebarria, N., Legorburu Fernadez, I., Lipnicki, D. M., Idoiaga Mondragon, N., & Santabárbara, J. (2023). Prevalence of Burnout among Teachers during the COVID-19 Pandemic: A Meta-Analysis. *International Journal of Environmental Research and Public Health*, 20(6), 4866. <https://doi.org/10.3390/ijerph20064866>
- Padmanabhanunni, A., & Pretorius, T. B. (2023). Teacher Burnout in the Time of COVID-19: Antecedents and Psychological Consequences. *International Journal of Environmental Research and Public Health*, 20(5), 4204. <https://doi.org/10.3390/ijerph20054204>
- Romeu-Labayen, M., Tort-Nasarre, G., Alvarez, B., Subias-Miquel, M., Vázquez-Segura, E., Marre, D., & Galbany-Estragués, P. (2022). Spanish nurses' experiences with personal protective equipment and perceptions of risk of contagion from COVID-19: A qualitative rapid appraisal. *Journal of Clinical Nursing*, 31(15–16), 2154–2166. <https://doi.org/10.1111/jocn.16031>
- Şenocak, E., Karaca, S., Tanhan, A., DemiR, Ş., & YiLdiZ Ozer, A. (2023). Burnout of the physiotherapists and encountered stress factors related to coronavirus epidemic in Turkey. *Journal of Exercise Therapy and Rehabilitation*, 10(1), 48–56. <https://doi.org/10.15437/jetr.1088287>
- Sönmez, D., & Çağlayan, F. (2022). Determination of the Effect of Work Stress on Burnout in Physiotherapy and Rehabilitation Department Employees After Epidemics and Application in Istanbul Private Rehabilitation Centers. *International Journal of Law and Social Science Studies*, 4(1), 12–32. <https://doi.org/10.51524/uhusbad.1007534>
- Tarakçı, E., Tütüncüoğlu, F., & Tarakçı, D. (2012). Examination of self-efficacy and burnout levels of members of a profession working in the field of special education and rehabilitation. 23(1), 26–35.
- Tekkas Kerman, K., Albayrak, S., Arkan, G., Ozabrahamyan, S., & Beser, A. (2022). The effect of the COVID-19 social distancing measures on Turkish women's mental well-being and burnout levels: A cross-sectional study. *International Journal of Mental Health Nursing*, 31(4), 985–1001. <https://doi.org/10.1111/inm.13009>
- Van Rooij, B., De Bruijn, A. L., Reinders Folmer, C., Kooistra, E. B., Kuiper, M. E., Brownlee, M., Olthuis, E., & Fine, A. (2020). Compliance with COVID-19 Mitigation Measures in the United States [Preprint]. PsyArXiv. <https://doi.org/10.31234/osf.io/qymu3>
- Yılmaz, Y., Erdoğan, A., & Bahadır, E. (2021). Fear, Anxiety, Burnout, and Insomnia Levels of Healthcare Workers during COVID-19 Pandemic in Turkey. *Psychiatria Danubina*, 33(Suppl 13), 350–356.