

Effects of Teachers' COVID-19 Fears on Burnout Levels: The Mediating Role of State Anxiety

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Abstract

This research aims to examine the mediating role of state anxiety in the effect of teachers' fears of Covid-19 on their burnout levels. For this purpose, survey model was used in the research. 387 teachers from different regions of Turkey participated in the research. 228 of the participants were female and 159 were male. In the research, Fear of Covid 19 Scale, State Anxiety Scale and Burnout Scale were used. The data were collected online due to the Covid 19 disease. We observed that the data showed a normal distribution. Cronbach's alpha coefficients of this study were found to be sufficient. It was found that teachers' fear of Covid 19 had a positive effect on state and state anxiety had a positive effect on burnout. Additionally, an indirect effect of state anxiety on burnout was found. In the study, it was seen that state anxiety played a mediating role in the effect of fear of Covid 19 on burnout.

Key Words

Fear of COVID-19 • State anxiety • Burnout • Teacher

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The coronavirus (COVID-19) disease began in Wuhan, China, and quickly spread throughout the world (Yıldırım et al., 2020). People worldwide have suffered negative consequences to their health, family life, work, and financial situation (Haas et al., 2021). COVID-19, which has a high infection and death rate, has also caused various symptoms, including stress, anxiety, depression, fear, spiritual burnout, and physical effects on human life (Arslan et al., 2020; Torales et al., 2020). In the emergence of these symptoms, situations such as a complete change of daily routines, lengthening of stay at home, and experiencing uncertainties were effective with the quarantine measures applied within the scope of the measures taken as the epidemic spread to the world on a large scale (Yıldırım & Solmaz, 2020).

Along with the uncertainty and economic recession caused by COVID-19, the possibility of contracting this epidemic for people has created a state of fear (Xiong et al., 2020). Fear is a negative emotion that negatively affects people's mental and physical health in relation to the speed of infectious diseases, mortality rate (Kumar & Nayar, 2020; Martinez-Lorca et al., 2020) and can increase the harm caused by the disease itself (Ahorsu et al., 2020). A high level of fear of contracting COVID-19 can cause people who have been infected with this epidemic and are probably infected to think irrationally, however, they can be labeled and socially excluded. However, it may increase the risk of developing different mental health problems (Ahorsu et al., 2020; Fitzpatrick et al., 2020).

Worrying about one's own and loved ones' health, being isolated from the community, losing personal freedoms, and the uncertainty of the future has all contributed to people's anxiety as additional stress factors caused by the pandemic (Huremovic, 2019). Coping with the stressors and changes brought on by the pandemic, as well as managing and completing work tasks, increases anxiety as the state of emergency and restriction persist (Savolainen et al., 2021). The uncertainties experienced during this period are shown to be a source of fear, and these uncertainties push individuals and societies to pessimism and anxiety at the same time (Bozkurt, 2018).

Stress begins when the demands from the environment along with the pandemic conditions exceed the individual's own resources (Clegg, 2001). According to Spielberg (1972), unpleasant and observable reactions such as sadness and tension experienced in stressful situations are called anxiety. This anxiety is divided into two as state anxiety and trait anxiety. State anxiety is an emotional reaction that occurs because of the individual's perception and interpretation of events as threatening, mostly for real reasons (Act. Büyüköztürk, 1997). This anxiety occurs periodically as a reaction to a situation triggered by an event (Çalık, 2020).

When the individual's methods of coping with stress are insufficient, the process eventually leads him to burnout syndrome (Erdem et al., 2010). Burnout is the individuals being away from his work due to reasons such as not being able to fulfill the expectations from the individual, being exposed to stress factors intensely, and loss of motivation. Although it is common in the service group for people (Arpacioğlu et al., 2021), teaching is also included in this group.

The pandemic has resulted in unprecedented declines in education and other aspects of human life (d'Orville, 2020). Due to unforeseen circumstances, schools had to temporarily close, and innovative educational practices such as online and distance learning have become the new normal at all educational levels (Cheng & Lam, 2021). In the school setting, teachers serve as role models for students facing various challenges, including the

threat of a pandemic. However, the pandemic environment has harmed teachers' mental health and well-being, which may impact their long-term commitment to the profession (Wong & Moorhouse, 2020).

Education has been one of the most affected areas by switching to distance and online education during the COVID-19 pandemic period. Considering that burnout causes many psychological problems, it is important to understand the factors associated with the stress experienced by individuals during the pandemic and the resulting anxiety and burnout to prevent such psychological problems. Accordingly, it was deemed necessary to reveal the extent to which the mental health of teachers was affected by the epidemic. Therefore, this study aims to examine the mediating role of state anxiety in the effects of teachers' fears of COVID-19 on their burnout levels.

Method

Research model

In the study, it was examined the mediator role of state anxiety in the effect of fears of COVID-19 on burnout levels. For this purpose, the relational survey model was used in the research (Karasar, 2007).

Study Group

The study included 387 teachers from various regions of Turkey. There were 228 female participants (58.9%) and 159 male participants (41.1%). The participants ranged in age from 26 to 55, with an average age of 36.18.

Data Collection Instruments

Personal Information Form: The researchers prepared this form to determine the characteristics of the participants (gender, age, marital status, educational status).

The Fear of COVID-19 Scale: Haktanir et al. (2020) translated and adapted the scale to the Turkish language. The scale consists of 7 items, such as "My hands become clammy when I think about coronavirus-19." The FCV-19S is Likert-type scale (1= strongly disagree and 5 = strongly agree). For this scale, a higher total score indicates a greater level of coronavirus fear. Item factor loads of the scale vary between .50 and .81. The Cronbach's alpha coefficient for the Turkish form was .86.

The State Anxiety Inventory (SAI): Le Compte and Öner (1976) translated and adapted the scale to the Turkish language (Eryüksel, 1987). The SAI consists of 20 items, such as "I am worried." Example item: 'I am nervous right now'. The Cronbach's alpha coefficient for the Turkish form was .94. The test-retest reliability coefficient of the scale was found between .68 and .26.

Burnout Syndrome Inventory Short Version: Tümkaya et al. (2009) translated and adapted the scale to the Turkish language. The scale consists of 10 items, such as "I feel tired." The scale is one factor and his factor explains 55.92% of the total variance. The factor loads of items varied from .54 to .87. Also, total score of items and correlation values were between .46 and .81. Internal validity reliability coefficient of inventory item was .91 and test-retest reliability was .70.

Period

Ethical standards were compliance in the collection, analysis and reporting of research data. The data were collected online due to the Covid 19 disease. Informed consent was obtained from all individual participants

included in the study. Demographic information form and scales were applied on the online platform (e.g. WhatsApp, email) The research was conducted on volunteer participants.

Data Analysis

In the study, firstly, missing data analysis was performed. SPSS package program was used to calculate the normality test and Cronbach alpha values of the scale. Direct and indirect impact analysis between variables was calculated using SPSS PROCESS (Hayes, 2018). Bootstrapping was performed with 5,000 samples and a 95% confidence interval (Montoya & Hayes, 2017).

Findings

Table 1 shows the mean, standard deviation, skewness and kurtosis values, and Cronbach's alpha coefficients. The skewness and kurtosis values were found to be in the 1.96 range, indicating a normal distribution (Karagöz, 2016). All Cronbach's alpha coefficients were found to be adequate because they were 0.70 or greater (Pallant, 2016).

Table 1

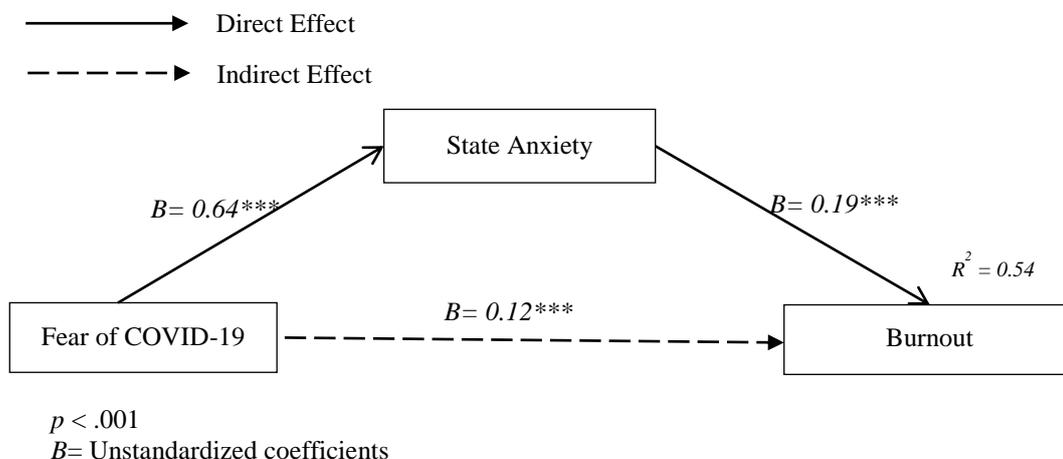
Descriptive Statistics

	α	M	SS	Skew.	Kurt.
Fear of COVID-19	.85	93.37	17.72	.33	-.35
State Anxiety	.88	57.72	43.57	.17	-.69
Burnout	.93	92.85	26.40	.25	-.68

** $p < .01$

Figure 1 shows that the partial mediating role of state anxiety in the effect of teachers' fear of Covid 19 on burnout. According to the bootstrapping result, fear of Covid 19 has a significant effect on state anxiety ($B = 0.64$, $t = 6.82$, $p < .001$). Similarly, state anxiety has a positive effect on burnout ($B = 0.19$, $t = 6.53$, $p < .001$). Additionally, the fear of Covid 19 has an indirect effect on burnout ($B = 0.12$, $CI = 0.07, 0.19$). In the study, the mediating effect of state anxiety on the effect of fear of Covid 19 on burnout is significant. Additionally, the fear of Covid 19 and state anxiety explain 54% of the variance (R^2) of burnout (Figure 1).

Figure 1

Mediation Effect Model**Discussion**

The COVID-19 pandemic, which emerged in 2020 and spread rapidly around the world in a short time, caused a global health crisis. COVID-19 has unusually threatened people's livelihoods (Xu et al., 2020) and has caused a lot of anxiety and concern (Bao et al., 2020; Galea et al., 2020). Anxiety (Spielberger et al., 1971), an emotional state characterized by feelings of tension and anxiety that occurs when under stressful situations, had a greater impact on people during the pandemic period (Çalık, 2020; Khoshaim et al., 2020; Lee, 2020; Wan et al., 2020).

In the study, the mediating effect of state anxiety on the effect of fear of Covid 19 on burnout is significant. The study's findings were found to be in agreement with previous research. According to studies, being exposed to epidemic news (including the number of patients and deaths), being in crowded places, and seeing someone sneezing or coughing around them increases people's anxiety and fear during the pandemic period (Memiş Doğan & Düzel, 2020). These stress factors, which increase in our lives because of COVID-19, increase anxiety (Cao et al., 2020) and depression (Dilmen Bayar et al., 2020) in individuals. Studies shows that there is a close relationship between COVID-19 disease and mental health problems (Şimşir et al., 2021).

When an individual's coping strategies with increasing stress factors are insufficient, the process leads to burnout syndrome (Erdem et al., 2010). Burnout is defined as long-term fatigue, low motivation, and apathy toward work, as well as exposure to a high-stress work environment. Furthermore, individuals suffering from work burnout not only jeopardize their health and well-being, but also reduce the quality of their work, increasing the likelihood of making mistakes (Embriaco et al., 2007). In a recent study, Ölmezoğlu İri and Korkmaz (2021) reported that having COVID-19 anxiety negatively predicted employees' productivity at work and positively predicted absenteeism, according to their study.

It has been reported in the literature that an increased fear of contracting COVID-19 is associated with increased anxiety, and that excessive anxiety causes serious distress and dysfunction in individuals (Pittig et al., 2021). Similarly, it has been stated that excessive fear has a negative impact on well-being (Mertens et al., 2020) and creates disharmony (Asmundson & Taylor, 2020). Furthermore, it has been revealed that people who were

quarantined during the pandemic experienced mental health issues such as stress, fear, depression, hopelessness, and burnout (Brooks et al., 2020).

There is a negative relationship between increasing fear of COVID-19 and intolerance of uncertainty, depression, stress, and anxiety, according to the literature (Bakioğlu et al., 2020). Furthermore, fear of COVID-19 predicts burnout, depression, anxiety, and post-traumatic stress disorder in various occupational groups (Alper Ay & İcen, 2021; Arpacolu et al., 2021; Elhadi et al., 2020; Hu et al., 2020; Koç & Arslan, 2021; Luceo - Moreno et al., 2020).

The results of this study are limited to the data obtained from the study group. Repeating the research in different samples will contribute to the literature. In addition, different studies should be conducted on the impact of COVID-19 on teachers.

Ethic

I declare that the research was conducted in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

Author Contributions

All authors contributed equally.

Conflict of Interest

There is no conflict of interest in the research.

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References

- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: Development and initial validation. *International Journal of Mental Health and Addiction*, 1-9. <https://doi.org/10.1007/s11469-020-00270-8>
- Alper Ay, F., & İcen, B. T. (2021). Türkiye'de COVID-19 pandemisinin 3. Pik döneminde sağlık çalışanlarının COVID-19 kaygısı ve tükenmişlik düzeylerinin değerlendirilmesi [Evaluation of COVID-19 anxiety and burnout levels of health workers in the 3rd peak period of the COVID-19 pandemic in Turkey]. *Uluslararası Sosyal Araştırmalar Dergisi*, 14(80), 1-17.
- Arpacıoğlu, M. S., Baltacı, Z., & Ünübol, B. (2021). COVID-19 pandemisinde sağlık çalışanlarında tükenmişlik, Covid korkusu, depresyon, mesleki doyum düzeyleri ve ilişkili faktörler [Burnout, fear of Covid, depression, occupational satisfaction levels and related factors in healthcare professionals in the COVID-19 pandemi]. *Cukurova Medical Journal*, 46(1):88-100.
- Arslan, G., Yıldırım, M., Tanhan, A., Buluş, M., & Allen, K. A. (2020). Coronavirus stress, optimism-pessimism, psychological inflexibility, and psychological health: Psychometric properties of the Coronavirus Stress Measure. *International Journal of Mental Health and Addiction*, 1-17.
- Asmundson, G. J., & Taylor, S. (2020). Coronaphobia: Fear and the 2019-nCoV outbreak. *Journal of Anxiety Disorders*, 74, 102258.
- Bakioğlu, F., Korkmaz, O., & Ercan, H. (2020). Fear of Covid-19 and positivity: Mediating Role of Intolerance of Uncertainty, Depression, Anxiety, and Stress. *International Journal of Mental Health and Addiction*, 1-14.
- Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: Address mental health care to empower society. *Lancet*, 395, e37-e38.
- Bozkurt, H. B. (2018). Aşı reddine genel bir bakış ve literatürün gözden geçirilmesi [An overview of vaccine rejection and review of literature]. *Kafkas Tıp Bilimleri Dergisi*, 8(1), 71-76.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., et al. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912-920.
- Büyüköztürk, Ş. (1997). Araştırmaya yönelik kaygı ölçeğinin geliştirilmesi [Development of anxiety scale for research]. *Eğitim Yönetimi*, 3(4), 453-464.
- Çalık, M. (2020). Determining the anxiety and anxiety levels of university students in the COVID-19 outbreak. *International Journal of Medical Science and Clinical Invention*, 7(7), 4887-4894.
- Cao, W., Fang, Z., Hou, G., Man, M., Xu, X., Dong, J., et al. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112939.
- Cheng, L., & Lam, C. Y. (2021). The worst is yet to come: The psychological impact of COVID-19 on Hong Kong music teachers. *Music Education Research*, 23(2), 211-224.

- Clegg, A. (2001). Occupational stress in nursing: A review of the literatures. *Journal Of Nursing Management*, 9(2), 101–6.
- Dilmen Bayar, B., Yaşar Can, S., Erten, M., & Ekmen, M. (2020). Covid-19 pandemi sürecinde üniversite öğrencilerinin depresyon ve stres düzeylerinin belirlenmesi [Determination of depression and stress levels of university students in the covid-19 pandemic process]. *Paramedik ve Acil Sağlık Hizmetleri Dergisi*, 2(1),12-25.
- d'Orville , H. (2020). COVID 19 causes unprecedented educational disruption: Is there a road towards a new normal? *Prospects*, 49, 11-15.
- Elhadi, M., Msherghi, A., Elgzairi, M., Alhashimi, A., Bouhuwaish, A., Biala, M., et al. (2020). Burnout syndrome among hospital healthcare workers during the covid-19 pandemic and civil war: A cross-sectional study. *Front. Psychiatry*, 11, 579563.
- Embriaco, N., Papazian, L., Kentish-Barnes, N., Pochard, F., & Azoulay, E. (2007). Burnout syndrome among critical care healthcare workers. *Curr Opin Crit Care*, 13(5), 482–488.
- Erdem, D., Atçı, H., Akan, B., Albayrak, D., Gökçınar, D., & Göğüş, N. (2010). Anesteziyoloji ve reanimasyon kliniği asistanlarının yoğun bakım çalışma dönemlerinin, tükenmişlik, iş doyumunu, işe bağlı gerginlik ve durumluluk-süreklilik kaygı düzeylerine etkisi [The effects of working in intensive care unit for the assistant doctors of the department of anesthesiology and reanimation, for the burnout, work-related stress, work satisfaction and state-trait anxiety levels]. *The Medical Bulletin of Şişli Etfal Hospital*, 44(3), 93–99.
- Eryüksel, G.N. (1987). *Ergenlerde kimlik statülerinin incelenmesine ilişkin kesitsel bir çalışma* [A cross-sectional study on the examination of identity status in adolescents]. (Master Dissertation), Hacettepe University, Ankara.
- Fitzpatrick, K. M., Harris, C., & Drawve, G. (2020). Fear of COVID-19 and the mental health consequences in America. *Psychological Trauma: Theory, Research, Practice and Policy*, 12(S1), S17–S21.
- Gaeta, L., & Brydges, C. R. (2020). Coronavirus-related anxiety, social isolation, and loneliness in older adults in Northern California during the stay-at-home order. *Journal of Aging & Social Policy*, 1–12.
- Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Intern. Med*, 180, 817–818.
- Haas, B. W., Hoefl, F., & Omura, K. (2021). The role of culture on the link between worldviews on nature and psychological health during the COVID-19 pandemic. *Personality and Individual Differences*, 170, 110336.
- Haktanir, H., Seki, T., & Dilmaç, B. (2020): Adaptation and evaluation of Turkish version of the fear of COVID-19 Scale. *Death Studies*, 1–9.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. (6th Ed.), Guilford publications.
- Hu, D., Kong, Y., Li, W., Han, Q., Zhang, X., Zhu, L. X., et al. (2020). Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. *EclinicalMedicine*, 24, 100424.

- Huremovic, D., & Khan, S. (2019). Psychology of the Pandemic. D. Huremovic içinde, *Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak* (pp. 37-44). New York: Springer.
- Karagöz, Y. (2016). *SPSS 23 ve AMOS 23 uygulamalı istatistiksel analizler* [SPSS 23 and AMOS 23 applied analysis]. Ankara: Nobel Publishing.
- Karasar, N. (2007). *Bilimsel araştırma yöntemi* [Scientific research method]. Ankara: Nobel Publishing.
- Koç, H., & Arslan, C. (2021). Adaptation and psychometric evaluation of the turkish version of the coronavirus anxiety scale. *Journal of Cognitive-Behavioral Psychotherapy and Research*, 10(2), 146-154.
- Khoshaim, H. B., Al-Sukayt, A., Chinna, K., Nurunnabi, M., Sundarasan, S., Kamaludin, K., et al. (2020). Anxiety level of university students during COVID-19 in Saudi Arabia. *Front. Psychiatry*, 11, 579750.
- Kırmızıgül, H. G. (2020). *Covid-19 salgını ve beraberinde getirdiği eğitim süreci* [The Covid-19 pandemic and the resulting education process]. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi (ASEAD)*, 7(5), 283-289.
- Kumar, A., & Nayar, K. R. (2020). COVID 19 and its mental health consequences. *Journal of Mental Health*, 30(1), 1-2.
- Le Compte, W. A., & Oner, N. (1976). Development of the Turkish edition of the State-trait anxiety inventory. *Cross-Cultural Anxiety*, 1, 51-67.
- Lee, S. A. (2020). Coronavirus anxiety scale: A brief mental health screener for COVID-19 related anxiety. *Death Studies*, 44(7), 393-401.
- Luceño-Moreno, L., Talavera-Velasco, B., García-Albuérne, Y., & Martín-García, J. (2020). Symptoms of posttraumatic stress, anxiety, depression, levels of resilience and burnout in Spanish health personnel during the COVID-19 pandemic. *Public Health*, 17(15), 5514.
- Martinez-Lorca, M., Martínez-Lorca, A., Criado-Alvarez, J. J., Armesilla, M. D., & Latorre, J. M. (2020). The fear of COVID-19 scale: Validation in Spanish University students. *Psychiatry Research*, 293, 113-350.
- Memiş Doğan, M., & Düzel, B. (2020). Covid-19 özelinde korku-kaygı düzeyleri [Fear-Anxiety Levels in Covid-19]. *Electronic Turkish Studies*, 15(4), 739-752.
- Mertens, G., Gerritsen, L., Duijndam, S., Salemink, E., & Engelhard, I. M. (2020). Fear of the coronavirus (COVID-19): Predictors in an online study conducted in March 2020. *Journal of Anxiety Disorders*, 74, 102258.
- Montoya, A. K., & Hayes, A. F. (2017). Two-condition within-participant statistical mediation analysis: A path-analytic framework. *Psychological Methods*, 22(1), 6-27.
- Ölmezoğlu İri, N. İ., & Korkmaz, F. (2021). Çalışanların Koronavirüs Kaygı Düzeylerinin İşte üretkenliğe etkisinde presenteeizmin aracılık rolü [The mediating role of presenteeism in the effect of employee coronavirus anxiety levels on productivity at work]. *International Journal of Society Researches*, 11(17), 3367-3389.
- Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using SPSS*. Ankara: Anı Publishing.

- Pittig, A., Glück, V. M., Boschet, J. M., Wong, A. H., & Engelke, P. (2021). Increased anxiety of public situations during the COVID-19 pandemic: Evidence from a community and a patient sample. *Clinical Psychology in Europe*, 3(2), 1-17.
- Savolainen, L., Oksa, R., Savela, N., Celuch, M., & Oksanen, A. (2021). COVID-19 anxiety-A longitudinal survey study of psychological and situational risks among finnish workers. *International Journal of Environmental Research and Public Health*, 18(2), 794.
- Spielberger, C. D., Gonzalez-Reigosa, F., Martinez-Urrutia, A., Natalicio, L., & Natalicio, D. S. (1971). Development of the Spanish edition of the statetrait anxiety inventory. *Interamerican J. Psychol*, 5, 145–158.
- Şimşir, Z., Koç, H., Seki, T., & Griffiths, M. D. (2021). The relationship between fear of COVID-19 and mental health problems: a meta-analysis. *Death Studies*, 1-9. <https://doi.org/10.1080/07481187.2021.1889097>
- Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of COVID-19 Coronavirus and its impact on global mental health. *The International Journal of Social Psychiatry*, 66(4), 317–320.
- Tümekaya, S., Karadağ, F., Oğuzhanoğlu, N. K., Tekkanat, Ç., Varma, G., Özdel, O., & Ateşçi, F. (2009). Schizophrenia with obsessive-compulsive disorder and obsessive-compulsive disorder with poor insight: A neuropsychological comparison. *Psychiatry Research*, 165(1-2), 35-46.
- Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (Covid-19) epidemic among the general population in China. *International Journal of Environmental Research and Puclic Health*, 17, 1729.
- Wong, K. M., & Moorhouse, B. L. (2020). The impact of social uncertainty, protests, and COVID19 on Hong Kong teachers. *Journal of Loss and Trauma*, 25(8), 694–655.
- Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M., Gill, H., Phan, L., et al. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic rewiev. *Journal of Affective Disorders*, 277, 55–64.
- Xu, J., Ou, J., Luo, S., Wang, Z., Chang, E., Novak, C., et al. (2020). Perceived social support protects lonely people against covid-19 anxiety: A Three-wave longitudinal study in China. *Front. Psychol.*, 11, 566965.
- Yıldırım, M., & Solmaz, F. (2020). COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 burnout scale. *Death Studies*, 1–9.
- Yıldırım, M., Geçer, E., & Akgül, Ö. (2020). The impacts of vulnerability, perceived risk, and fear on preventive behaviors against COVID-19. *Psychology, Health & Medicine*, 1–9.