

COVID-19 pandemic and mental health of educators in higher education institution: a systematic literature review

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ABSTRACT

Emergency transformation of the education system due to the COVID-19 increased mental and emotional disorders risks of educators in higher education institutions. Thus, this study aims to examine how COVID-19 impacts the mental well-being of educators, and also explore the contributing factors to these issues. A systematic review was conducted, involving the identification of scientific articles related to mental health, lecturers, professors, and COVID-19. The research was performed on two reputable publication databases, SCOPUS and Web of Science. Following pre-established inclusion and exclusion criteria, this study utilized PRISMA to select and analyze the research articles. Through this process, a total of 59 articles have been identified from the electronic databases, out of which seven articles were selected for evaluation. The findings indicate that a significant number of educators encountered various mental health challenges in the midst of the pandemic, including burnout, anxiety, depression, and stress. Numerous factors, such as an imbalance between job demand and job resources, a lack of support, personal factors, and other emergency remote teaching-related factors, all contribute to the issues. This study offers valuable insights that can be utilized to develop optimal practices for educators to address and manage their mental health and well-being in the future.

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1. INTRODUCTION

The COVID-19 crisis posed a significant threat to the global education system [1], [2]. Indeed, national lockdowns or strict isolation measures introduced by most countries to minimize the spread of the disease not only affect the worldwide economic situation and socioeconomic position [3], but the whole education system [4]. The enforcement mechanisms cause educational institutions to close which in turn witness substantial emergency transformation in the education system from conventional classroom settings to online learning environments [5], and seminars to webinars [6]. Adaptation to the new norms not only involves the daily routine of the students but also among the educators.

The abrupt changes forced the educator to immediately adopt fresh instructional strategies in order to foster student learning resulting in the development of emergency remote teaching (ERT) [7]–[9]. Unlike well-planned online-based learning that places an emphasis on long-term educational goals [10], ERT is a

strategy to give temporary educational assistance technique that is easy to set up and ready to use [11]. ERT mandated that educators in higher education institutions combine traditional teaching methods with technology-enhanced ones [12]–[14]. According to Hodges *et al.* [10], ERT is a transitory switch from in-person education to a new way of instruction delivery; remote teaching as a result of exceptional circumstances. Once the emergency is under control, the approach will switch back to in-person instruction.

However, ERT poses a significant problem for educators [15]–[20] because of its fast-track approval, reliance on ad hoc instructional support systems, and lack of pre-planned infrastructure or resources [21]. Inadequate technological capacity to accommodate the concurrent demands of numerous users [22], disparities in access to and utilization of information [23], [24] and a shortage of educators equipped with the necessary training to effectively integrate information technologies into their daily teaching practices [25] are additional challenges during the implementation of ERT. Besides, ERT necessitates significant adaptations and the acquisition of new skills to seamlessly integrate it into the current curriculum [26].

In light of the above situation, educators must be able to multitask in order to successfully manage their professional commitments, handle extra administrative duties, and maintain a healthy balance between their personal and social life [27], [28]. In addition to having a broad range of abilities and being current, teachers also need to conduct research [29], which can exacerbate mental health issues. Furthermore, [30] emphasize that despite the fact that online learning has been proven to be a successful method of imparting knowledge, especially during times of mandatory lockdowns and restrictions, by providing both students and teachers with a number of advantages include increased accessibility, lifelong learning opportunities, better quality and affordability of educational materials, as well as flexibility in the delivery of instruction, yet rapid changes and unforeseen obstacles still arise [31]. Contend that COVID-19 and its preventive measures, such as ERT, have placed educators in an environment that is even more difficult and has an adverse impact on their mental health.

Mental health issues have been a longstanding concern within the education system. Several scholars argue that teaching is one of the most stressful professions [32], [33]. Additionally, Brondino *et al.* [33] contend that during the pandemic, higher education institutions are known for experiencing elevated levels of work-related stress. According to Cohen [34] the effectiveness of education is significantly impacted by educators' mental health. In fact, Baker *et al.* [35] highlight that educators' effectiveness, mentally healthy personalities, and psychological wellbeing are major factors in student achievement. Thus, to do their jobs effectively, educators need to maintain their mental well-being. A diminished level of mental health and wellness can reduce work productivity, which will ultimately cause burnout or possibly a career break [36].

In recent times, several scholars have highlighted the diverse impact of COVID-19 on the mental well-being of educators in higher education institutions across different countries such as Mexico, Portugal, China, Brunei, and the United Arab Emirates. While these scholars conducted national studies using online surveys and document analysis to investigate specific questions, they were unable to fully capture the complexity of the situation and represent the perspectives of various stakeholders worldwide. Systematic literature reviews are recognized as valuable scholarly contributions as they help to map, consolidate, synthesize, and refine existing knowledge from relevant literature while also providing insights for future research directions.

As far as the authors are aware, there is a scarcity of systematic literature review studies that specifically explore how the COVID-19 pandemic, including emergency remote teaching, has affected the mental health of educators in higher education institutions. Hence, this study aimed to contribute to the scholarly discourse by conducting a systematic review, which enables us to locate and comprehend relevant research findings, sub-themes, populations, and geographic areas that necessitate further exploration.

This study employed the preferred reporting items for systematic reviews and meta-analyses (PRISMA) method to identify pertinent articles from the SCOPUS and Web of Science databases. By analysing seven articles directly related to the impact of COVID-19 on the mental health of educators in higher education institutions, the findings reveal that a majority of educators encountered a range of mental health issues including burnout, anxiety, depression, and stress, during the pandemic due to changes in work and personal lifestyles. To draw broader conclusions, future research could incorporate a wider range of databases to encompass a more diverse set of studies.

2. RESEARCH METHOD

2.1. Data sources and search strategy

This systematic review was carried out in November 2022. This study selected relevant articles published from 2020 to 2022, examining the effects of COVID-19 on the mental well-being of educators in higher education institutions. All the articles were sourced from highly reputable journals listed in the

SCOPUS and Web of Science database. According to Budiman *et al.* [37] and Sholihah *et al.* [38], this study applied the preferred reporting items for systematic reviews and meta-analyzes (PRISMA) method. The keywords employed to search appropriate research articles in the SCOPUS and Web of Science database are “mental health”, “lecturer”, “professor” and “COVID-19”.

2.2. Selection criteria

The inclusion criteria for scientific article searches were limited to those that met the following standards: i) English articles that were written and published from 2020 to 2022; ii) Articles having full-text scientific reviews and novel research; iii) A comprehensive review of the downloaded research works is conducted to gather empirical data on how COVID-19 effect on educators employed in higher education institutions. Articles on mental health related to other professions or that fall outside the scope of the COVID-19 pandemic will be removed.

2.3. Data extraction

This study's PRISMA flow chart is depicted in Figure 1. The initial searching process from SCOPUS and Web of Science databases using “mental health”, “lecturer”, professor and “COVID-19” as keywords, as well as filter criteria; research article, and 2020-2022 publication time frame revealed 59 relevant research articles. Then, the abstracts of all the publications will be read and evaluated in accordance with the inclusion criteria mentioned above. Abstracts that did not fit the requirements for inclusion were removed. Meanwhile, complete texts of articles that fulfil the inclusion criteria are downloaded for further review in gathering the empirical results. Finally, seven articles meet the criteria and are pertinent to the present research.

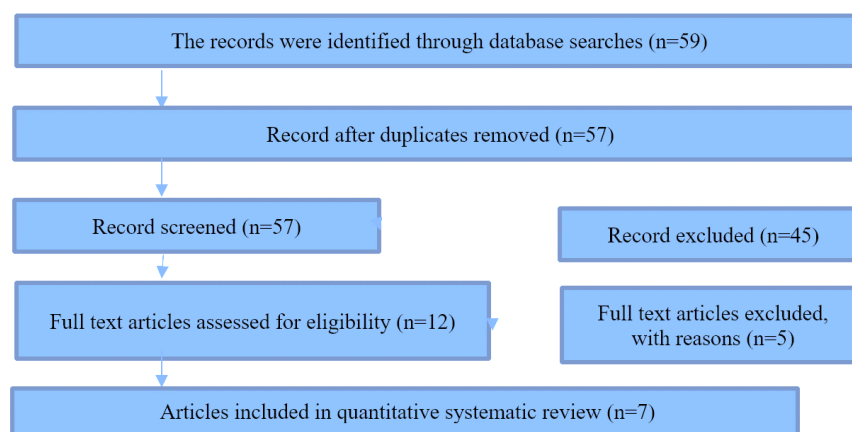


Figure 1. PRISMA flow diagram for literature identification

3. RESULTS AND DISCUSSION

This systematic literature review study is based on seven articles assessed from high-quality journals databases; SCOPUS and Web of Science. All the articles selected adhere to specific inclusion and exclusion measures discussed above and have been thoroughly reviewed to collect information in answering the objectives of this study, how the COVID-19 affect mental well-being of higher education institutions' educators. Table 1 presents the traits of the articles eligible for inclusion in the systematic review. All articles published between 2020 and 2022 pertain to research outcomes concerning the impact of the COVID-19 pandemic including ERT on the mental health of higher education institutions' educators. The selected prior studies from various research settings namely Mexico, China, German, Brunei, Budapest and Portugal.

Table 2 presents the factors affecting mental health problems among educators working at higher education institutions during the crisis. Among the factors that significantly contributed to the risk of mental health include increasing job demands resulting from ERT, inadequate of job resources, insufficient technological support, lack of information, excessive bureaucracy and paperwork, higher workload, deadlines, changes in sleep pattern, personal-related factor; resilience and satisfaction of life, and demographic factors comprising gender, age, marital status and family size. Meanwhile, Table 3 indicates the mental health problems experienced by educators amidst the COVID-19 crisis and ERT implementation. Generally, prior studies document that the most mental health problems experienced by higher education institutions' educators are burnout, depression, anxiety and stress.

Table 1. The characteristics of the articles selected

Authors	Research setting	Sample size
[39]	Mexico	831
[40]	Portugal	51
[41]	China	1060
[42]	German	24
[43]	Brunei	56
[44]	Budapest	35
[45]	United Arab Emirates	278

Table 2. Factors affecting mental health problem in higher education institutions educators

Authors	Factors of mental health problem
[39]	Increase job demands; excessive bureaucracy and paperwork, lack of job resources; lack of support from supervisors and institution, academic resilience, demographic factors; age, gender, mental status
[40]	Personal attributes; satisfaction of life, resilience and sleep routine changes
[41]	Imbalance between job demands and job resources
[42]	Implementation of medical education and ERT-related factors; Insufficient student interaction, shift to remote teaching, home office without childcare
[43]	ERT-related factors; deadlines, unforeseen disruptions, increased workload, and concerns related to work, family, and personal well-being.
[44]	COVID 19 related factors
[45]	Personal attributes; satisfaction level, stress level, number of school children and teaching experience

Table 3. The types of mental health problem faced by higher education institutions educators

Authors	The types of mental health problem
[39]	Burnout; guilt, emotional exhaustion, indolence
[40]	Burnout; Individual burnout, job-related burnout, and student-related burnout, depression, anxiety and stress
[41]	Online teaching anxiety
[42]	Distress
[43]	Stress
[44]	Mental health level; wellbeing, resilience, savoring, self-regulation, creative-executive efficiency
[45]	Burnout; individual burnout, job-related burnout, home teaching-related burnout

3.1. The factors affecting mental health problems in educators of higher education institutions

COVID-19 and its prevention strategies such as control movement orders resulted in various stressors that trigger risks of mental health among citizens including [39]–[45]. The implementation of ERT in ensuring the continuity of students' learning increases job demands to the educators which contributes to anxiety and burnout [39]. It is because ERT requires educators to carry out effective online teaching, yet the educators have various difficulties [15], [16] include unreliable network connectivity, limited technological proficiency, limited experience on online teaching and lack of online technology training. In addition, the existing curriculum, as well as redesigning teaching activities and objectives to suit the online learning context [26] may result in a significant level of teaching anxiety due to the time and effort involved.

According to Bakker and Demerouti [46], the job demands-resources model suggests that a favorable work environment should offer employees adequate job resources to meet their job demands while also keeping those demands at a manageable level, thereby reducing job stress and anxiety [39], [40]. Nevertheless, in the context of the COVID-19 pandemic and ERT, educators in higher education institutions are faced with increased job demands. These demands include ensuring good network access, being proficient in using teaching platforms, and maintaining effective interaction with students. In fact, Li *et al.* [47] argue that the integration of information and communication technology (ICT) into the classroom can lead to work overload, role ambiguities, changes in work patterns, the constant need for upgrading digital knowledge and skills, and higher demands for performance and productivity.

Nevertheless, during the pandemic, there is insufficient job resources such as lack of technological or digital training, lack of support from peers and other staff, lack of clear information, lack of infrastructure and equipment, and lack of job security and opportunities [15]–[20], to mitigate the adverse effects resulting from job demands. such as teaching anxiety [41], [48]. Defined job resources as organizational resources and personal resources that assist individuals in effectively managing stress and alleviating the psychological and physical burdens caused by job demands. Therefore, due to imbalance between job demands and job resources, result in a heightened level of burnout and teaching anxiety among educators [41].

In addition, prior studies report that concern on the implementation of medical education including medical training during the pandemic leads to the increase of educators' distress [40], [42], [43]. For instance, Idris *et al.* [43] reports that educators' express concerns that the utilization of virtual-imitation

patients, role-plays, and laboratory pre-recorded videos and virtual clinical skills demonstrations may compromise students' practical skills.

Further, the analysis reveals that demographic factors such as age, sex, marital status and family size affect mental health problems in educators at higher education institutions. For example, Gracia-Rivera *et al.* [39] report that guilt was more prominently exhibited among older men. Meanwhile, Gracia-Rivera *et al.* [39] also indicates that amongst the professors who were married and had children, there was a notable display of heightened resilience against mental exhaustion than their peers. Besides, Idris *et al.* [43] contends that life satisfaction and changes in sleep routine are significant factors that affect mental health problems. It is because lower satisfaction with life and change in sleep routine results in tiredness, and exhaustion, which subsequently leads to a higher burnout risk.

3.2. The mental health problems among higher education institutions' educators during COVID-19 pandemic

In the ERT context, educators will encounter greater challenges compared to the conventional teaching method [45] which lead to an increased risk of a mental health problem such as burnout [49]. Defined burnout as professional exhaustion resulting from prolonged exposure to high levels of stress which affects people psychologically. Meanwhile, the World Health Organization (WHO) [50] has classified burnout as an illness developed from unmanaged occupational stress, resulting in reduced work interest, a diminished sense of accomplishment, and feelings of dehumanization. A study conducted by García-Rivera *et al.* [39] revealed that a substantial proportion of professors experienced burnout syndrome; guilt, mental exhaustion and indolence due to COVID-19. However, suggest the importance of resilience as a preventive measure against burnout among professors. Particularly Gracia-Rivera *et al.* [39] discovered that professors with higher academic resilience were more effective in preventing burnout compared to their counterparts. added that academic resilience refers to the capacity to persist and adapt in the face of persistent and challenging educational adversities and difficulties. In the same vein, Miguel *et al.* [40] examines the impact of COVID-19 on medicine lecturers' burnout. According to them, there are three categories of burnout faced by educators during the pandemic namely individual burnout, job-related burnout and student-related burnout. The results revealed that the educators mostly suffered from personal burnout (41.2%), followed by work-related burnout (37.3%) and student-related burnout (15.7%) respectively.

In addition, some prior studies document that higher education institutions' educators suffer from anxiety, depression and stress [40]–[43]. For instance, Miguel *et al.* [40] provide evidence that a significant majority of the medicine faculty lecturers who participated in their study had anxiety (84.3%), depression (82.4%) and stress (78.4%) during the pandemic. Consistent with research work by Miguel *et al.* [40], Idris *et al.* [43] reports the mental health adverse impact among lecturers in Brunei. Specifically, the findings show that their study's participants felt more stressed during the pandemic arose from deadlines, unforeseen disruptions, increased workloads, and concerns encompassing work, family, and personal well-being. Nevertheless, Idris *et al.* [43] highlight that receiving support and being in proximity to family at home play a vital role in alleviating stressors amongst the lecturers. Similarly, Hermann-Werner *et al.* [42] employ the State-Trait Anxiety Inventory to measure distress levels among medical faculties educators in German, the findings show the increasing distress level which mostly contributes by medical education factors, followed by clinical work and private life. Although they indicated their ability to cope with distress effectively, but highlighted the need of institutional support to alleviate stressors amongst the educators such as to improve communication between educators and institutions as well as the government by providing clear and transparent information to the educators during the pandemic [42]. Besides, Hermann-Werner *et al.* [42] add that training also will be a mechanism that will decrease stress level by helping educators to learn how to use digital technologies and transforming medical education into a digital platform.

Further, anxiety is another mental health problem for higher education institutions educators. For instance, Zhang *et al.* [41] contends that most of their study's participants suffered from online teaching anxiety during the pandemic. It is because educators face various challenges in performing their duties including unstable networks, lack of technology literacy, lack of online technological training, and poor interaction between students and educators, which subsequently resulted in a significant level of teaching anxiety.

4. CONCLUSION

The wellbeing and mental health of educators around the world have been severely harmed by the COVID-19 pandemic. ERT has grown in importance as a teaching strategy in most higher education institutions during the crisis. Even while ERT is crucial for maintaining the continuity of the teaching and learning process, the method appears to raise the danger for mental health. According to the results of a systematic literature review analysis, educators frequently experienced mental health issues such as burnout,

stress, depression, and anxiety. To help educators successfully adapt to a scenario, several preventive measures must be put into place. These include fostering resilient values, life satisfaction, training in a variety of skills, including technology expertise, as well as individual and organizational support.

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