



Research Article

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Stress among Teachers in Virtual Classrooms Working in the Higher Education Sector during the COVID-19 Outbreak

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ABSTRACT

Teaching is one of the most stressful professions since teachers have many responsibilities to meet the targets such as teaching, lesson planning, classroom management and discipline, supervisory role, extracurricular activity, etc. However, during the COVID-19 outbreak, teaching has become challenging for professional teachers. A total number of 85 professional teachers were screened, by which 73 subjects provided informed consent to take part in the study and were included in the study. A stress questionnaire developed by International Stress Management Association UK (ISMA) was used to assess the stress among professional teachers. Among the 50 subjects, five subjects had a history of hypertension, one subject had diabetes mellitus, 11 subjects had low back pain, five subjects had knee pain, and two subjects had migraine. The stress assessment questionnaire revealed that 64% of subjects were towards moderate risk, 34% high risk, and 2% low risk for stress. The present study concludes that professional teachers are at moderate to high risk of developing occupational-related stress associated with health-related problems.

Key words: *Stress, Education, Teacher, Profession*

INTRODUCTION

The World Health Organization (WHO) defined *pandemics* as spreading a specific disease that affects many people globally (WHO) [1] COVID-19 is a newly discovered virus that spreads rapidly from one to another [2]. As declared by the World Health Organization (WHO), Coronavirus Disease-2019 (COVID-19) was a global pandemic that dramatically increased stress and other mental disorders [3]. Reports discovered the virus in Wuhan, China, before reporting it as an international public health emergency in January 2020 [4, 5].

Besides several countries becoming aware of the virus and taking precautions to fight it, Saudi Arabia also took strict precautionary measures on its citizens to control its rapid spread of the disease. The strict implications affected many of the kingdom's sectors, but the education system was most affected.

By introducing travel bans and curfews, the country forced the closure of public places of agglomeration and even suspended the Umrah pilgrimage [6]. The impact of disease outbreaks on mental health, physical health, and well-being was shown in several studies. There are many risk factors for psychological distress, and several people showed a high risk of experiencing it [7].

As defined by stress, "Stress is a consequence of the mismatch between an individual and their environment, and the perceived inability to accomplish the obstacles and demands that result." This can harm someone's

performance and health, and even their ability to cope with the environment. Stress symptoms commonly include increased adrenaline production, coping mechanisms through short-term resistance and exhaustion, inability to concentrate, muscle tension, irritability, and various physiological reactions, including elevated heart rate and headaches [8].

Today, stress has become an inevitable part of everyday life. Whether in the family, at work, in an institution, or the community, nearly every individual is stressed because of the ever-increasing needs, load, and pressure [9]. Various aspects of life, such as the pace of life, overwork, job security, top competition, deadlines, and information overload, have made life stressful for individuals in modern societies [10].

Currently, teaching is considered being one of the most stressful professions. There are a few reasons for this, which are quite like other stressful occupations. As a profession, teaching is becoming more stressful and affecting people's personal and professional lives [11]. Nowadays, teaching is more stressful since teachers have many targets to meet with more responsibilities, such as teaching, management and discipline, classroom, lesson planning, supervisory role, and extracurricular activity [11].

In a study conducted by Eres and Atanasoska evaluating the stress levels of different occupations by the Health and Safety Executive, teaching has been reported with the highest stress level among many other professions. Another report in 2000 documented that 41.5% of teachers had themselves 'highly stressed,' while 58.5% came into a 'low stress' category, while 36% of teachers felt the impacts of stress all or most of the time [12]. In pandemic situations, this stress level is considered more because of several factors that affect classroom teaching. Therefore, the present study aimed to estimate the factors responsible for StressStress in virtual teaching during the COVID-19 pandemic.

MATERIALS AND METHODS

In the present questionnaire-based survey, study subjects were higher professional teachers employed at Hail University, Saudi Arabia. We screened 85 professional teachers, of which 73 subjects were included in the study. Subjects aged between 20 to 40 years were included, and subjects above 50 years were excluded from the study due to age-related stress factors. The stress questionnaire developed by the International Stress Management Association UK (ISMA) was used electronically to assess the stress among professional teachers. Seventy-three questionnaires were distributed to faculty members through email, out of which 50 duly filled-in questionnaires were received. The Statistical Package for the Social Sciences (SPSS) version 16.0 for MAC analyzed the collected data.

RESULTS AND DISCUSSION

In the present study, there were 50males questionnaire data collected, and after we carried analysis out whereas, mean age was 33.50 ± 8.52 years, mean height was 167.78 ± 8.46 centimeters, weight was 70.07 ± 12.22 kilograms with mean work duration was 8.24 ± 0.86 hours, and sleep time was 6.83 ± 1.07 hours (**Table 1**). Among the 50subjects, five subjects had a history of hypertension, one subject had diabetes mellitus, 11 subjects had low back pain, five subjects had knee pain, and two subjects had migraine (**Table 2**). The stress assessment questionnaire revealed that 64% of subjects were a moderate risk, 34% high risk, and 2% low risk for stress (**Table 3**).

Table 1. Descriptive Characteristics

Parameters	Mean \pm Std.dvn
Age	33.50 \pm 8.52
Weight (Kg)	70.07 \pm 12.22
Height (cms)	167.78 \pm 8.46
Work hours (hrs)	8.24 \pm 0.86
Sleep time (hrs)	6.83 \pm 1.07
Job duration (Years)	3.25 \pm 1.0

Table 2. Frequency of Comorbidities

Co-Morbidities	Frequency
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Hypertension	5 (10%)
Diabetes mellitus	1 (2%)
Cardiomyopathies	0 (0%)
Low back pain	11(22%)
Knee pain	5 (10%)
Migraine	2 (4%)

Table 3. Stress Risk Score

Stress category	Score Frequency
Low risk	1 (2%)
Moderate risk	32 (64%)
High risk	17 (34%)

Studies estimated the universal outbreak was 28.0% for depression; 26.9% for anxiety; 24.1% for post-traumatic stress symptoms; 36.5% for stress; 50.0% for psychological distress; and 27.6% for sleep difficulties. Several studies documented that the prevalence of stress among professional teachers during a pandemic is very high, with significant variation [13].

Whereas in the present study, we found that professional teachers have moderate to high risk for Stress. This finding supports the past research that one of the main reasons for Stress is the teaching profession, where demands are very high [14]. A research carried out in Spain documented a remarkably higher outbreak of stress and anxiety than other research. It was the only one where, during data collection, teachers had returned to classroom teaching after a period of small classes. The higher outbreak of stress and anxiety can be explained, in part, by the uncertainty of the effect of classroom teaching on the risk of contagion, because of the greater need for communicating with other professionals from different departments, colleges, and universities [15].

Health status has always been considered as the basis of the causes of any disorder or illness concerning the risk factors. So, different items associated with health status were investigated in this study. The findings showed that other associated health problems, such as low back pain, hypertension, and knee pain, could affect the stress level of professional teachers. It is well reported that occupational stress is associated with the physical conditions of professional teachers [16-21].

An individual is more easily affected by nervousness, excitement, downheartedness, or tired mood affects negative affectivity, resulting in an adverse perception of the work environment. Another essential fact responsible for stress could be pandemic situations and workload. Work-related factors, lack of physical activity, lack of direct communication, work overload, role insufficiency, and pressure have also been reported to strongly affect professional teachers' stress. In the present study, the mean work hours were 8.24 ± 0.86 hours per day associated with disturbed sleep. The risk of reporting disturbed sleep could be related to work demands, lack of physical activity, eye strain because of audiovisual aids, lack of social activity, etc. Working under high demands to match in-person teaching with virtual teaching was the most apparent relation between work factors and disturbed sleep. This agrees with the researches attributing disturbed sleep to work Stress [22]. Inability to perform professional tasks because of physical health conditions or health problems because of workload at the workplace may play a significant role in developing Stress.

Several mental health studies have studied general populations internationally and globally during the pandemic. Wide-spread panic is created when there is a lack of knowledge of infectious disease and implementing sudden control measures. The novelty of the virus itself and the uncertainty and unpredictability of when the situation will be controlled has put people under excessive stress, especially when face-to-face social interactions are lost. Patients infected by the virus or who are suspected of having contracted the illness experience the fear of its potential fatality [23, 24]. In the present study, we observed moderate stress levels in professional teachers. This is most likely because of virtual teaching demand for different roles. Other sources of Stress would include performing lectures, examinations through virtual mode, work pressure, loneliness, and lack of physical activity.

CONCLUSION

The present study concludes that professional teachers are at moderate to high risk of developing occupational-related stress because of virtual teaching associated with health-related problems.

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