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GENERAL HEALTH STATUS AND ONLINE TEACHING READINESS AMONG EDUCATORS DURING COVID-19 PANDEMIC

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Abstract:

The current COVID-19 outbreak has resulted in several life adjustments, including modifications to education. Online learning has become the primary mode of teaching and learning. Consequently, the purpose of this study is to determine the level of educators' overall health and its impact on their readiness for online teaching. The study used a total of 220 educators from primary level to tertiary level, both private and public. These characteristics were evaluated using the General Health Questionnaire and the Online Teaching Readiness Questionnaire. The results indicate that the participants' general health is excellent and that they are highly prepared for online teaching. According to correlational research, the two variables are also significantly connected. A few suggestions for future research are offered at the conclusion of the publication.

Keywords:

Mental Health, Physical Health, Educators, Online Teaching, COVID-19, Quantitative Study

Introduction

The Coronavirus (COVID-19) pandemic has spread all over the world, affecting almost all countries and territories. In December 2019, Wuhan, China, was the first place where the

outbreak was found. The countries around the world told people to be careful. The public care strategies have included handwashing, wearing face masks, physical separation, and not meeting in groups or assemblies. Lockdown and stay-at-home strategies have been put in place to help flatten the curve and stop the spread of the disease (Simon & Sievertsen, 2020).

Most schools, training institutes, and higher education facilities have been closed in most countries because of the COVID-19 pandemic. There has been a big change in how teachers are able to provide high-quality education through different online platforms. It's been a success with online, distance, and continuing education, even though there are challenges for both teachers and students. This global pandemic has never been seen before. There are few or no other options for people who want to change from face-to-face learning to online learning. This can be a big change for both the people who are learning and the people who teach them. "Education in Emergency" has been adopted by the education system and the teachers through several online platforms. They are forced to use a system they aren't ready for. During this pandemic, e-learning tools have been very important. They have helped schools and universities keep students learning during the closure of universities and schools (Subedi et al., 2020). Adapting to new changes requires assessing staff and student readiness. Learners with a fixed mindset struggle to adapt, whereas learners with a development mindset readily adapt. Online learning has no one-size-fits-all pedagogy. Subjects have various needs. Online learning methodologies vary by subject and age group (Doucet et al., 2020). Since there is a lack of study that investigate teachers' readiness to educators during COVID-19, this study will explore such area in relation to educators' general health status. Specifically, the study aims to answer the following research questions

1. What is the level of general health status among educators?
2. What is the level of teaching readiness among educators during the pandemic?
3. Is there any significant relationship between educators' general health status and their teaching readiness?

Literature Review

The COVID-19 outbreak caused various levels of disruptions in education globally. The purpose of these school closures is to try to prevent further transmission of COVID-19 through self-isolation, shielding and social distancing. Doucet et al. (2020) suggested that planning for education in this pandemic requires three approaches. During the school closure, the first is a stop-gap approach to ensuring Maslow before Bloom, safety, and survival before formal education. The second strategy includes long-term solutions that address educational inequities that are revealed when schools are not physically accessible. Finally, pedagogical innovation will propel all schools toward blended learning to provide inclusive and equitable education to all students.

For teachers, the shift to online education has meant rethinking lesson plans to fit a very different format. Teachers were expected to redo all of the curricula so that they could teach it online because a lot of it relied on teachers being present and guiding students through certain things (Gorey, 2021). Educators all over the world have found themselves managing virtual classrooms, communicating with students via social media platforms, and learning by doing as they provide education from a distance to over 1.5 billion students affected by school and

colleges closures. One of the biggest challenges faced was to keep students on board and there were risks of losing students who are disadvantaged where their home situations do not allow them to participate in lessons (UNESCO, 2020). It has been difficult to convert teaching materials into digital format on short notice because only a few educators have strong digital and ICT skills. Many countries in Southwest Asia and Sub-Saharan Africa have only about 20% or fewer of their households connected to the internet, let alone personal computers (UNESCO, 2020).

However, educators' wellbeing is the key. It is natural for people, including educators, to feel more stressed and anxious in such unprecedented and uncertain times, specifically during the pandemic. Educators require socio-emotional support to deal with the additional pressures placed on them to deliver learning during a crisis, as well as to support their students' emotional needs. Teachers were found to be stressed at medium to high levels. More than half of them spent more than four hours per day on remote teaching, with secondary grammar schoolteachers experiencing significantly more stress and working significantly more hours per day than special education teachers (Klapproth et al., 2020). A study done by Ozamiz-Etxebarria et al. (2020) revealed that a high percentage of teachers showed anxiety, depression, and stress symptoms. When compared with other variables, studies found that female teachers, teachers who are 47 years old and above, and who are teaching at the primary level have greater anxiety, stress, and depression symptoms than their counterparts (Ozamiz-Etxebarria et al., 2020). However, Magzumova et al. (2020) found that age and gender did not significantly differ in the level of stress. A more recent study on the level of teaching suggested that secondary school teachers were more stressed as compared to primary school teachers (Kamarulzaman & Kamarul Zaman, 2022) which are contradicted the study presented earlier. Furthermore, Kamarulzaman and Kamarul Zaman (2022) also found that teaching staff who are teaching in private institutions with less than 5 years of teaching experience felt more unstable in general health status during the COVID-19. Teachers were also found to have a high level of distress due to the high level of workload during the pandemic (Aperribai et al., 2020).

Educators' readiness to teach during the pandemic is also explored in the study. Studies found that teachers represent confidence in teaching online and have high readiness in emergency remote teaching (Alqabbani et al., 2021; Suryanti et al., 2021). Iskrov et al. (2021) discovered that, despite an increase in e-learning use following COVID-19, many obstacles arose during the adaptation process, including lectures and training sessions that were not conducted according to the curriculum, changes in both students' and instructors' academic behaviour and attitude, and low levels of engagement, satisfaction, and motivation in class. Teachers were found to have technical competencies but insufficient skills in course design, communication, and time management (Paliwal & Singh, 2021). Nonetheless, Perifanou et al. (2021) suggested that teachers were able to use digital tools to communicate and interact with students but not in terms of giving feedback to formative assessment. Studies also reported that the participants struggled with designing assessments, especially summative assessments using digital tools (Cutri et al., 2020; Perifanou et al., 2021; Rapanta et al., 2020). Moreover, teaching readiness between genders and cultural orientation revealed that female educators and those who are from countries with a tendency toward uncertainty avoidance and long-term orientation are more likely to be ready as compared to their counterparts (Scherer et al., 2021). Also, although

anxiety level was found to be moderately correlated with readiness for emergency remote teaching among educators (Alqabbani et al., 2021), there is a scarcity of studies that explored more the relationship between general health status among educators and their readiness in teaching during the pandemic. Hence, the study will contribute to the body of knowledge in the area.

Method

The study's main goal is to determine the relationships between educators' health status and their online teaching readiness. Educators' level of health status as well as their online teaching readiness were also examined. The quantitative design was used to achieve the objectives.

Instrument

The study employed questionnaire with three parts; the first part asked the demographic information of the participants – gender, work sector, duration of service and teaching level, the second part consists of the General Health Questionnaire with 28 items, and the third part are the questionnaire that measures the Online Teaching Readiness Questionnaire (OTRQ).

The General Health Questionnaire – 28 (GHQ-28) is a self-report screening tool used to identify potential psychological disorders. The GHQ-28 identifies two major concerns: (1) the inability to perform normal functions; and (2) the appearance of new and distressing phenomena (Goldberg & Hillier, 1979 as cited in McDermott et al., 2015). Test-retest reliability has been reported to be high (0.78 to 0.9), and both interrater and intrarater reliability have been demonstrated to be excellent (Cronbach's alpha 0.9–0.95) and it also has high internal consistency (Failde and Ramos 2000, as cited in Sterling, 2011). The GHQ-28 has a strong correlation with the Hospital Depression and Anxiety Scale (HADS) (Sakakibara et al., 2009) and other depression measures (Robinson & Price 1982; as cited in Sterling, 2011).

The GHQ-28 measured the general health status with 4-Likert scale: *Not at all*; *Not more than usual*; *A little more than usual*; and *More than usual*. For the reverse items were rated with *More than usual*; *As usual*; *Less than usual* and *Much less than usual*. Table 1 shows the sample items of GHQ-28.

Table 1: Sample Item of GHQ-28

Had difficulty in staying asleep once you are off?
Felt constantly under strain?
Been getting edgy and bad-tempered?
Been getting scared or panicky for no good reason?
Found everything getting on top of you?
Have you been feeling perfectly well and in good health? *
Been managing to keep yourself busy and occupied? *
Felt on the whole you were doing things well? *
Been satisfied with the way you've carried out your task? *
Been able to enjoy your normal day-to-day activities? *

* Reverse items

The Online Teaching Readiness Questionnaire (OTRQ) is an instrument developed by Hosny et al. (2021) which consists of 30 items with a 5-Likert Scale of *Strongly Agree*, *Agree*, *Uncertain*, *Disagree* and *Strongly Disagree*. The reliability has been reported to be high which ranging from 0.70 to 0.95 which is an acceptable reliability score (Tavakol & Dennick, 2011). The questionnaire consists of five constructs namely Online Teaching and Course Design Skills; Digital Communication; Basic Computer Skills; Advanced Computer Skills; and Using Learning Management Systems. However, for this study, the questionnaire was revised and the items that assess Advanced Computer Skills were not included. Thus, the reliability score for the questionnaire is 0.945.

Table 2: Sample Items for OTRQ

I can use office applications, such as Open Office, Microsoft Word, and Microsoft PowerPoint.

I can perform file management on my computers, such as copying, moving, renaming and deleting files or folders.

I can send and receive emails and open and send email attachments.

The demographic information is the independent variable whereas the scores of GHQ-28 and OTRQ are the dependent variables.

Sample and Population

The study involved male and female teachers from primary and secondary schools, along with lecturers from colleges and public and private universities in the Klang Valley. Snowball sampling method was used in the study and 220 educators were employed.

Procedures

The Survey Sparrow form was used as the online platform for the questionnaire. The questionnaire was also translated to the Malay language to ease the understanding of the participants.

The Snowball sampling method was used where the questionnaire was distributed via WhatsApp groups and shared on the Teacher's Facebook pages. 220 respondents were gathered after two months the questionnaire was distributed. Participants' consent was gathered when they agreed to answer the questionnaire.

Data Analysis

The data were analysed using the Statistical Package for Social Sciences (SPSS) software. The study hypothesised that 1) the level of general health status among educators is at a high level 2) the level of online teaching readiness is at a high level, and 3) there is a significant relationship between educators' health status and their online teaching readiness. Descriptive statistics were used to test the first and the second hypotheses while correlation analysis was utilised to test the third hypothesis.

Results

The study aims to determine 1) the level of general health status among educators; 2) their level of online teaching readiness, and 3) the relationship between educators' general health status and their online teaching readiness.

Demographic Information

The demographic data was collected in the first part of the questionnaire as shown in Table 3. Male participants were only 12.7% while the rest were female participants (87.3%). Educators from the secondary level were the least in number, followed by the primary and tertiary levels at 9.1%, 21.8% and 69.1%. Most of the participants work in the private sector (61.4%) than in the public sector (38.6%).

Table 3: Demographic Information

Item	Frequency	Percent
Gender		
Male	28	12.7
Female	192	87.3
Teaching level		
Primary	20	9.1
Secondary	152	69.1
Tertiary		
Sector		
Public	85	38.6
Private	135	61.4

Level of General Health Status among Educators

The first objective is to examine the level of general health status among participants. Descriptive analysis was used to analyse the levels of general health status among educators as shown in Table 4. The item "*Been able to enjoy your normal day-to-day activities?*" scored the highest mean (M=2.62), indicating that the participants were found to rate more on the "*less than usual*" scale on this item. The item which scored the least mean (M=1.24) was "*Found that the idea of taking your own life kept coming into your mind?*" That indicated the participants were not at all thinking to commit suicide.

The total mean of 2.053 indicated that the participants have a high level of general health status that and they were not feeling ill physically and psychologically.

Table 4: Level of General Health Status

	N	Mean	Std. Deviation
Have you been feeling perfectly well and in good health?	220	2.35	.640
Been feeling in need of a good tonic (supplement/vitamins)?	220	2.20	1.000
Been feeling run down and out of sorts	220	2.60	.909
Felt that you are ill?	220	1.93	.953
Been getting any pains in your head?	220	2.25	.997
Been getting a feeling of tightness or pressure in your head?	220	2.33	.937
Lost much sleep over worry?	220	2.16	.932
Had difficulty in staying asleep once you are off?	220	2.11	.869
Felt constantly under strain?	220	2.20	.884
Been getting edgy and bad-tempered?	220	2.18	.918
Been getting scared or panicky for no good reason?	220	1.85	.944
Found everything getting on top of you?	220	2.40	.967
Been feeling nervous and strung-up all the time?	220	2.00	.956
Been managing to keep yourself busy and occupied?	220	2.20	.774
Been taking longer over the things you do?	220	2.44	.871
Felt on the whole you were doing things well?	220	2.29	.707
Been satisfied with the way you've carried out your task?	220	2.56	.709
Felt that you are playing a useful part in things?	220	2.18	.767
Felt capable of making decisions about things?	220	2.16	.597
Been able to enjoy your normal day-to-day activities?	220	2.62	.844
Been thinking of yourself as a worthless person?	220	1.71	.930
Felt that life is entirely hopeless?	220	1.51	.953
Felt that life isn't worth living?	220	1.33	.717
Thought of the possibility that you might make away with yourself?	220	1.47	.808
Found at times you couldn't do anything because your nerves were too bad?	220	1.84	1.025
Found yourself wishing you were dead and away from it all?	220	1.33	.766
Found that the idea of taking your own life kept coming into your mind?	220	1.24	.661
Total	220	2.0532	.53424

Level of Online Teaching Readiness among Educators

Table 5 shows the items that measure online teaching readiness among educators.

Table 5: Level of Online Teaching Readiness

	N	Mean	Std. Deviation
I can use office applications, such as Open Office, Microsoft Word, and Microsoft PowerPoint.	220	4.31	.934
I can perform file management on my computers, such as copying, moving, renaming and deleting files or folders.	220	4.35	1.015
I can send and receive emails and open and send email attachments.	220	4.69	.761
I can use an Internet browser, such as Google Chrome, Firefox or Safari to search the Web and upload/download files and programmes.	220	4.69	.659
I feel comfortable using an LMS (Learning Management System), such as Moodle and Google Classroom, to build an online course.	220	3.84	1.111
I feel comfortable using features in the LMS to facilitate student learning.	220	3.75	1.015
I feel comfortable using LMS assessment tools to evaluate student performance.	220	3.47	1.207
I feel comfortable using the LMS to record student grades.	220	3.42	1.173
I am detail oriented.	220	3.80	1.019
I am good at organising teaching materials	220	3.84	1.007
I expect online teaching to take more time than face-to-face instruction, and I am prepared for it.	220	3.89	1.076
I am willing to provide timely and constructive feedback on student performance.	220	3.93	.873
I feel comfortable communicating through writing and can do it easily.	220	3.55	1.026
I feel more comfortable communicating through speech than through writing.	220	4.07	.893
I feel comfortable conveying my personality and/or emotions through speaking.	220	4.07	.852
I feel comfortable conveying my personality and/or emotions through writing.	220	3.33	1.082
I feel comfortable writing measurable learning objectives based on Bloom's taxonomy.	220	3.71	.910

I know how to accommodate student needs, feel comfortable designing active learning activities that allow students to interact with their peers, instructors and course content.	220	3.80	.982
I understand copyright law and fair use guidelines when using copyrighted materials.	220	3.85	.944
I understand accessibility policies on student needs.	220	3.91	.839
I know how to accommodate student needs.	220	3.93	.761
TOTAL	220	3.9134	.66875

The second research question is to determine the level of online teaching readiness among educators. Two items scored the highest mean ($M=4.69$) "I can send and receive emails and open and send email attachments," and "I can use an Internet browser, such as Google Chrome, Firefox or Safari to search the Web and upload/download files and programmes", that shows that the participants agreed that they are able to do those tasks. However, participants were found not to be comfortable to convey their personality through writing ($M=3.33$).

The overall mean of 3.90 indicated that the participants have high level of agreement (Putra, 2016) of their readiness to teach online.

The Relationship Between General Health Status and Online Teaching Readiness among Educators

The third objective of the study hypothesised that there is a significant relationship between educators' general health status and online teaching readiness. Pearson Correlation was used to analyse the data as shown in Table 6 below.

Table 6: Correlations

		Health	Readiness
Health	Pearson Correlation	1	-.221**
	Sig. (2-tailed)		.001
	N	220	220
Readiness	Pearson Correlation	-.221**	1
	Sig. (2-tailed)	.001	
	N	220	220

** . Correlation is significant at the 0.01 level (2-tailed).

Results suggest that there is a significant negative weak correlation between the two variable ($r=-0.221$, $p=.001$, $p<0.001$) that suggested that the participants' low level of disturbance in the psychological and physical condition is significantly correlated to their high level of online teaching readiness thus, H_0 is rejected.

Discussion and Conclusion

There are three objectives of the study which are to determine educators' level of general health status and their online teaching readiness as well as the relationships between the two variables.

Discussion

Our results suggested that the participants have high level of good general health status during COVID-19. This notion is incongruent with the finding by Klapproth et al. (2020) that suggested that teachers were found to be stressed at medium to high levels. They also elaborated that more than half of the teachers spent more than four hours per day on remote teaching, with secondary grammar schoolteachers experiencing significantly more stress and working significantly more hours per day than special education teachers. Also, a study done by Ozamiz-Etxebarria et al. (2020) revealed that a high percentage of teachers showed anxiety, depression, and stress symptoms. The incongruency is assumed to be based on the reason that perhaps since the data was collected after more than a year of the pandemic, thus, educators are more adaptive to the situation.

The level of online teaching readiness among participants was found to be high during the pandemic. The results are consistent with the studies that found that teachers represent confidence in teaching online and have high readiness in emergency remote teaching (Alqabbani et al., 2021; Suryanti et al., 2021). Other studies suggested that teachers were found to have technical competencies but insufficient skills in course design, communication, and time management (Paliwal & Singh, 2021). However, Perifanou et al. (2021) suggested that teachers were able to use digital tools to communicate and interact with students but not in terms of giving feedback to formative assessment. Furthermore, more studies reported that the participants struggled with designing assessments, especially summative assessments using digital tools (Cutri et al., 2020; Perifanou et al., 2021; Rapanta et al., 2020).

Moreover, our results suggested that there is a significant negative correlation between educators' health status and their teaching readiness which suggested that the low physical and psychological problems lead to better online teaching readiness. This notion however is contradictory with a study that found anxiety level was moderately correlated with readiness to emergency remote teaching among educators (Alqabbani et al., 2021). Nevertheless, Scherer et al. (2021) stated that gender and cultural orientation played a role in online teaching readiness where those individuals from countries with long term orientation will be more likely to be ready for online teaching.

Conclusions

The study aims to determine 1) the level of general health status among educators; 2) their level of online teaching readiness; and 3) the relationship between educators' general health status and their online teaching readiness. Two types of questionnaires namely General Health Questionnaire and Online Teaching Readiness Questionnaire were used and 220 educators from primary, secondary, and tertiary levels answered the questionnaire. Descriptive analysis as well as the correlational analysis were employed in the study. Results suggested that the participants have good status of general health, and they are highly ready for online teaching. Correlation analysis recommended that there is a significant correlation between the two variables. Thus, the study suggested that educators in Malaysia do not face any difficulties in terms of teaching online that affect their wellbeing. For future research, it is recommended that the health status could be more specific to either physical or psychological so that the situation could be understood better. Furthermore, the online teaching readiness items can be grouped and more focused on which area of online teaching are better prepared by educators.

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