

The Role of Digital Proficiency During Online Classes among Teaching Professionals and Its Impact on Occupational Stress

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ABSTRACT

The 2020 pandemic situation has led to increased use of Digital Technology, which has spread its avenue even to the field of education. To prevent the students to be deprived from education the Higher Education council and UGC mandated online classes during lockdown which made the teaching fraternity to witness the novel way of working during lockdown i.e., experiencing work from home through online mode. The current research article aims at investigating the role of digital proficiency while conducting online classes during lockdown in pandemic situation among Teaching Professionals and its impact on occupational Stress. To examine the same the sample of 180 College teachers, teaching at various degree colleges of Benaguru were asked to participate in online survey through Google form, digital proficiency and levels of occupational stress were determined by administering Occupational Stress Index developed by Dr A.K Srivatsav & Dr A.P Singh and questions pertaining to digital applications including both computer hardware and software was employed to get insight about digital proficiency. Based on the scores of digital proficiency of respondents, the teachers were categorized under two groups – Teachers with low digital proficiency N=97 and Teachers with high digital proficiency N= 83. Directional hypothesis was formulated to analyze occupational stress among the two groups, and the obtained results were statistically analyzed using independent samples ‘t’ tests. The obtained ‘t’ scores on occupational stress index indicated that there is a significant difference between both the groups. Teaching professionals with better digital proficiency experienced low level of occupational stress compared to teaching professionals with low digital proficiency indicating the alarming need for improvisation of digital proficiency.

Keywords: *Digital Proficiency, Online classes, Occupational stress and College Teachers*

The novel corona virus pandemic has changed the routine of every individual in the country, which triggered anxiety, stress and fear among the people (Montemurro 2020). The pandemic situation has affected the physical and psychological health of the citizens of the country. The pandemic situation has led to drastic changes in working sector from physical office to virtual office in varied domains including the field of education. The preventive measures initiated by the government asked each citizen to get isolated from the public places to break the chain link of viral infection, due to the same the

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universities, colleges, schools were closed down and to continue the students in their academics a new pedagogy was framed by education ministry such as online classes, virtual class room and work from home for the teaching fraternity which immensely created mental pressure and increased rate of stress, anxiety and stress among both teachers and students (Charnsil, C et al., 2020) teachers were asked to continue the academic activities like conduction of classes, assignments, internals and seminars through online mode, thus The pandemic, has led teachers to shift from traditional physical class method to online teaching which made the teachers to face the new challenges.

One of the prominent areas where teachers experienced the challenge while conducting the online classes was digital proficiency. Technological awareness was very much the crucial part in arranging online classes. Studies have reported that teachers' inability to use and integrate technology in classroom setting is because of lack of resources, time pressure and lack of support from institution (Pittman et al., 2015) which inhibited them to update themselves from computer technologies. In addition, teachers are also likely to experience stress if they have to use technology for which they do not feel competent enough (Al-Fudail et al., 2008).

The present-day students are considered to be 'digital native' generation (Prensky 2001), as they are quick in adapting to online teaching technologies, which expects the teaching fraternity to develop digital competence (Jager-Biela et al., 2020) use various digital tools and digital resources to implement new pedagogy and make learning more effective (Eickelmann et al., 2020). Thus, the new pedagogy of shifting the class from colleges to home through online made the teachers to get themselves acquainted with digital proficiency and those teachers who had problem in learning the new skill sets experienced occupational stress.

METHODOLOGY

Objective

1. To analyse occupational stress experienced during online classes among the teachers with digital proficiency

Hypotheses

H1:- Teachers with better Digital Proficiency experienced low level of occupational stress during online classes.

Sample

For the present study 180 college teachers from various Degree colleges of Bengaluru City, between the age group of 25 to 55 years were selected.

Tools Used

- **Information schedule:** to retrieve the demographic an information schedule was developed which collected the details such as age, gender, length of service, marital status, number of dependents in the family, number of children etc.
- **Digital Proficiency :** a questionnaire related to digital proficiency was developed by the researcher which aimed at knowing the participants effective use of operating system of computer, awareness towards mobile and computer applications such as Zoom, MS Teams, Google Meet etc, independency in scheduling and conducting online classes, basics of social media sites and basic awareness towards computer hardware and software.

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- **The Occupational stress Index (OSI)** (1984)- Developed by Dr.A.K.Srivatsav and Dr. A.P. Singh. The occupational stress index consist of 46 items with 12 sub areas, and subject is expected to rate each item on a 5 point rating scale on a quantum of ‘*Strongly disagree, Disagree, undecided, Agree and Strongly Agree.*’

Procedure

An online survey was conducted during the COVID 19 Lockdown situation, through google form information schedule, Digital proficiency questions and occupational stress index scale were sent to 400 college teachers from Bengaluru City through snow ball sampling technique, out of 400 samples, researchers could retrieve 180 completely filled data and further based on the scores on digital proficiency the samples were categorized into 2 groups – Teachers with better digital proficiency N=97 & Teachers with low digital proficiency N=83. Both the groups were compared for occupational stress level that they had experienced during Lockdown when they were instructed to engage online classes. The data was analyzed with the help of SPSS software using appropriate statistical techniques and hypotheses were verified.

RESULTS AND DISCUSSION

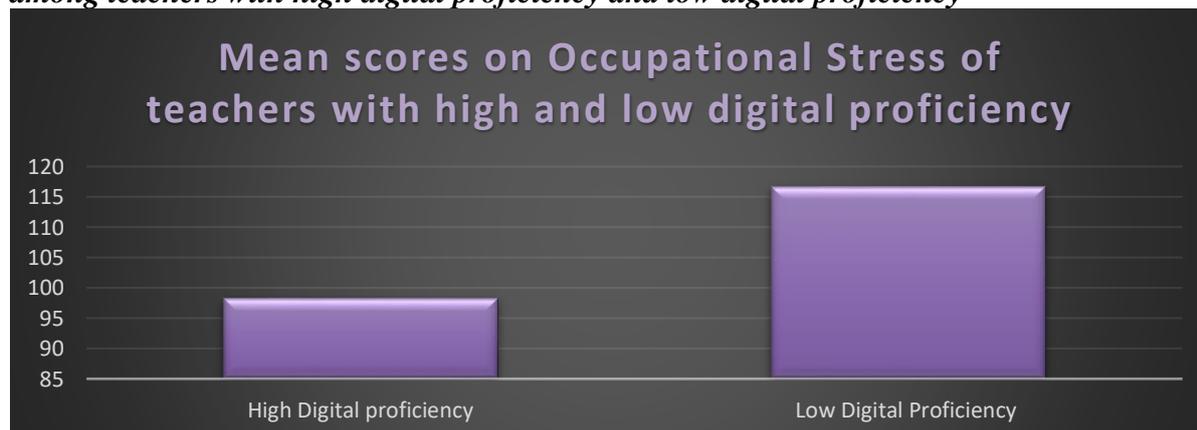
The analysis of data has been presented under following tables:

Table 1: Shows the t Value on Occupational stress among teachers with high digital proficiency and teachers with low digital proficiency along with mean scores.

Group	N	Mean	SD	t Value	df	P value
High Digital proficiency	97	98.3	10.8			
Low Digital Proficiency	83	116.7	14.6	9.53	178	.000

Table 1 shows the mean scores of teachers with high digital proficiency and low digital proficiency on occupational stress along with independent sample t test. As per the table the mean scores on occupational stress of teachers with high digital proficiency is 98.3 with the SD of 10.8 and the mean scores on occupational stress of teachers with low digital proficiency is 116.7 with the SD of 14.6, the ‘t’ value of two mean scores is (t= 9.53; P=.000) indicates significant difference between the two mean scores and according to the mean scores teachers with high digital proficiency experienced low level of occupational stress and teachers with low digital proficiency experienced high level of occupational stress during lockdown period while conducting online classes.

Figure 1 shows the Graphical representation of mean scores on Occupational Stress among teachers with high digital proficiency and low digital proficiency



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The Graphical representation of mean scores on Occupational stress among teachers of low digital proficiency and high digital proficiency experienced due to conduction of online classes during lockdown. the graphical representation clearly indicates that teachers with high digital proficiency experienced low level of occupational stress compared to teachers with low digital proficiency, through which we can infer that digital proficiency is need of the hour for the teaching fraternity.

DISCUSSION

Major findings of the study

- Teaching professionals differed significantly in terms of experience of occupational stress level during lockdown to conduct online classes.
- Teachers with high digital proficiency experienced low level of occupational stress whereas teachers with low digital proficiency experienced high level of occupational stress.

The present study aimed at investigating the role of digital fluency in conducting the online classes during COVID 19 Pandemic situation and its impact on occupational stress among the college teachers of Bengaluru city. The above statistical results indicated that there is a significant mean difference in occupational stress index of college teachers, thus teachers with high digital proficiency had better adaptation to online classes during lockdown period and experienced low level of occupational stress compared to teachers with low level of digital proficiency, demonstrating that knowledge towards digital proficiency such as participants effective use of operating system of computer, awareness towards mobile and computer applications such as Zoom, MS Teams, Google Meet, basics of social media sites and basic awareness towards computer hardware and software played an important role in effective conduction of online classes and further accommodating with the changing work setting from physical classes to virtual class room which made them to have low level of occupational stress. Whereas the teachers with low digital proficiency reported that they were dependent on someone to schedule their online classes, for presenting their screen during online classes and they would go blank if some internet glitches occurred during their sessions, which made them to experience high level of occupational stress, indicating the high need for digital proficiency among the college teachers. The present study has been ascertained by other researchers, Yang and Cornelius (2004) in their study indicated that technical knowledge and awareness towards technical issues is considered to be the very significant factor for the better dissemination of knowledge through online mode. it is also evident from the empirical studies that the problem regarding faculty indifference and resistance to technology integration is fairly common and poses occupational stress among the college and university teachers (Arinto, 2016). Study by Besser et al., (2020) reported that during lockdown, teachers experienced occupational stress in terms of adapting to recording time happened in the online classes and further it was also indicated by other study Ng (2007) that occupational stress were associated with several psychological issues among teachers which included anxiety, depression and sleep related issues.

Several other studies also indicated the causes of occupational stress during work from home situation such as financial worries, family dependency, aging parents, childcare and demand from home schooling (Daks et al., 2020), personal life too played a key role in experiencing the stress during the pandemic (Fitzpatrick et al., 2020). The empirical results indicated that they occupational stress emerges from various factors during pandemic and digital proficiency is one among them.

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CONCLUSION

- The present study proved digital proficiency is very important in conducting online classes.
- Through present study it is evident that digital proficiency has an impact on occupational stress of the college teachers.
- The present study identified the great need for digital proficiency in terms of computer OS literacy, use and awareness of various applications which is needed for smooth conduction of virtual classes and endorses the effective of online classes in future.

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Conflict of Interest

The author(s) declared no conflict of interest.

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