

OCCUPATIONAL STRESS AMONG HIGHER EDUCATION TEACHERS DURING THE COVID PANDEMIC SITUATION

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ABSTRACT

The objective of the study was to find out the extent of occupational stress among higher education teachers during covid pandemic situation with respect to subjects Mathematics, Physics, Botany, and Chemistry and to find out the difference in occupational stress of higher education teachers with respect to gender, management, and subjects. The survey method was adopted among 125 higher education teachers using Occupational Stress Scale developed and validated by the investigator. The statistical techniques used were percentage analysis, t-test, and ANOVA. The results showed that occupational stress among higher education teachers during covid pandemic situation with respect to subjects Mathematics, Physics, Botany, and Chemistry is high. Private higher education teachers showed more occupational stress than that government higher education teachers. Also there existed differences in the stress of higher education teachers with respect to subjects.

Keywords : Covid, Pandemic, Occupation, Stress

Introduction

The covid pandemic situation is a first-time experience in our lifetime in that we, the teaching community, are behind a screen and can't touch the students in our classroom. It's quite a new experience that we are using online platforms to cover a vast portion of our students. "Teachers have suffered stress from having to adapt (in record time) to provide online classes" (Besser et al., 2020). "This stress has often been accompanied by symptoms of anxiety, depression, and sleep disturbance as a consequence of the increased workload resulting from home teaching". (Ng (2007). Using this online platform, higher education teachers are suffering more, especially Science and Mathematics subject teachers. They often find difficult in transacting formulas, theories, figures, diagrams, etc. Whenever a teacher feels difficult in conveying his ideas to the students he feels utter dullness and fails to attain satisfaction after a class. Here the teachers are facing occupational stress, a serious issue faced by higher education teachers which affects their entire career and insisting a heavy workload on them. Also, the difficulties aroused due to the lack of proper formative and summative evaluation of the students were affecting the teachers and expressed in the form of stress.

"The activities of the higher education institutions are affected since conducting face-to-face class and laboratory activities would require physical interactions". Guagul, Fiseha; Suhail (2020). In such a way also the teachers found stress in fulfilling the necessary practical sessions needed for Physics, Chemistry, Biology, etc.

Significance of the study

The occupational stress among higher education teachers generates a lack of motivation and concentration among the students which leads to the deterioration of the quality of education. But India in its National Policy of Education 2020 demands quality as well as less strained education to students as per their aptitude and interest and gives freedom to students to select their subject for future careers. The progress of the nation is also in the hands of the teachers. "Teachers and faculty are the heart of the learning process". From the studies of Bane, Jui Vijay; Aurangabadkar, Sheetal; Karajgi, Asmita (2021) it was found that "teachers strongly agreed that communication during the online classes, lack of assessment of the students

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and conducting exams was a major cause for stress”. Also, the study of Etxebarria, Naiara Ozamiz; Santxo, Naiara Berasategi; Mondragon, Nahia Idoiaga; Santamaria, Maria Dosil (2021) found that a “high percentage of teachers showed psychological symptoms like anxiety, depression and stress symptoms as they had to introduce online teaching during the lockdown time”. These psychosocial risks may cause health problems, a lack of motivation, and a decrease in effectiveness at work, which in turn affect the quality of teaching.

In all these researchers, it was found that there existed stress for teachers at all levels and it will affect them psychosocially. Yet research was scarce in the field of occupational stress among higher education teachers due to the difficulties experienced because of the sudden shift to the online mode of education. Hence the researcher decided to conduct a study on this topic of occupational stress among higher education teachers during covid pandemic situation.

Objectives of study

1. To find out the extent of occupational stress among higher education teachers during covid pandemic situation with respect to subjects like Mathematics, Physics, Botany, and Chemistry and in total
2. To find out the difference in occupational stress of higher education teachers with respect to type of college.

Hypotheses of study

1. There is no significant difference in the mean scores of occupational stress of higher education teachers with respect to type of college.
2. There is no significant difference in the mean scores of occupational stress of higher education teachers with respect to subjects.

Methodology

In this study responses were collected using survey method from 125 teachers who were in the higher education institution located in Trivandrum district by random sampling method through Google forms as it was the pandemic period. The data were analyzed using Percentage Analysis, t-test (t), and ANOVA

Analysis and Interpretation

The extent of occupational stress among higher education teachers during covid pandemic situation with respect to subjects like Mathematics, Physics, Botany, and Chemistry in total was found using percentage analysis. The result was shown in Table 1

Table 1

The level of occupational stress among higher education teachers with different streams

Teacher's subjects	Low		Medium		High		Total
	N	%	N	%	N	%	N
Mathematic	5	18.51	8	29.62	14	51.85	27
Physics	6	23.07	7	26.92	13	50	26
Botany	7	18.91	13	35.13	17	45.94	37
Chemistry	9	25.71	11	31.42	15	42.85	35
Total	24	19.2	39	31.2	62	49.6	125

From Table 1, it was found that the extent of occupational stress among higher education teachers during covid pandemic situation with respect to subjects like Mathematics is high at 51.85%, Physics at 50%, Botany at 45.94%, Chemistry at 42.85% and total 49.6%. Hence the occupational stress among higher education teachers during covid pandemic situation with respect to subjects Mathematics, Physics, Botany, and Chemistry, and in total is high.

Hypothesis-1 : There is no significant difference in the mean scores of occupational stress of higher education teachers with respect to type of college.

Table 2

Comparison of government and private college teachers in their occupational stress

Variable	Type of College	N	Mean	S.D	't' value	Remarks
Occupational Stress	Government	56	103.2	5.023	5.547	S
	Private	69	108.3	5.218		

From table 2, it was found that the calculated t value 5.547 was greater than the table value 1.97 at 0.05 level of significance. It was found that private higher education teachers (Mean 103.3) showed more occupational stress

than that of government higher education teachers (Mean 108.3).

Hypothesis -2 : There is no significant difference in the mean scores of occupational stress of higher education teachers with respect to subjects.

Table 3
Comparison of occupational stress of higher education teachers with respect to subjects Mathematics, Physics, Botany, and Chemistry

Source	SS	df	MS	'F' value	Remarks
Between	8176167	3	2725389	19.95	S
Within	16531356	121	136622.8		

Table value at 0.05 level is 2.70

The F value presented in table 3 revealed that there existed significant difference among three groups namely Mathematics, Physics, Botany, and Chemistry with respect to occupational stress since the calculated F value (19.95) was greater than that of the table value 2.70 for (2, 121) degrees of freedom at 0.05 level significance. This means that there existed a difference in the optional stress of Higher Education teachers with respect to subjects.

Findings and Discussions of Study

1. It was found that the extent of occupational stress among higher education teachers during covid pandemic situation with respect to subjects like Mathematics is high at 51.85%, Physics at 50%, Botany at 45.94%, Chemistry at 42.85% and in total 49.6% is high. This may be due to the fact that teachers are facing more workloads through a small screen to make the students attentive throughout the session. This problem aroused strongly among the Science teachers particularly Mathematics, Physics, Botany, and Chemistry Teachers who demand more aids to write down formulas, theories, diagrams, problem sections, etc. than that of other teachers and for proper evaluation facilities.
2. It was found that private higher education teachers showed more occupational stress than that of government higher education teachers. This may be due to the insecurity of jobs in private sectors

particularly in the absence of offline classes. The shortage of offline classes, continuous pressure from private management for the high result of the students, and shortage of good infrastructure facilities for fulfilling online classes in the private management may also affect the teachers which results in their job stress.

3. The 'F' value showed that there existed a difference in the optional stress of Higher Education teachers with respect to subjects. The subjects such as Mathematics, Physics, Botany, and Chemistry require more attention from the part of the teachers as it contains numerous theories, proofs, problems and its solutions, etc. These form a problem for the teachers to explain it properly. They cannot wipe a blackboard as per their satisfaction for proving their theorems in order that, they get a clear picture that their students understood the problem. This constrained a teacher in using the online platform for explaining the theories and writing the formulas properly which may also result in the occupational stress among the teachers who are handling the science subjects like Mathematics, Physics, Botany, Chemistry etc.

Conclusions

Occupational stress among higher education teachers during covid pandemic situation with respect to subjects Mathematics, Physics, Botany, Chemistry, and in total is high. The private higher education teachers showed more occupational stress than that of government higher education teachers. Also, there existed a difference in the optional stress of Higher Education teachers concerning subjects.

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