

# Investigating Occupational Stress & Work from Home Experience of Female University Academics in Sri Lanka: with special reference to Covid-19

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**Abstract:** *The aim of this research is to explore occupational stress and Work From Home (WFH) experience throughout the Covid-19 pandemic of female academicians in Sri Lankan universities. A mixed research method was adopted where, quantitative and qualitative research designs were used. Occupational Stress Index questionnaire (OSI) and in-depth interviews were utilized for data collection purposes. Descriptive statistics, and thematic analysis were employed for analysis. A sample of 348 female university academics from state and non-state universities were selected by using multistage stratified sampling for quantitative objectives. The findings revealed that, most of the female academics from state universities experienced highest level of occupational stress compared to the female academics from non-state universities. Considering stress levels of inexperienced academics, highest level of stress was reported from the state universities, compared to the academics of non-state universities. Moreover, role overload was recorded as the factor that contributed to the highest level of stress among academics while the lowest stress contributing factor was reported to be the powerlessness. Twelve participants those who participated for the survey were randomly chosen for in - depth interviews. Outcomes of the thematic analysis revealed five main themes related to coping mechanism included: physical, cerebral, creative, communal, and psychological activities.*

**Keywords:** *occupational stress, work from home experience, female academicians, Covid-19, Sri Lankan universities.*

## 1. Introduction

By the end of March 2020, with the unforeseen arisen of the Covid-19 catastrophe, global governments-imposed restrictions on social mobility to lessen being transmitted of Covid-19 virus among populations (Habaibeh, et al., 2021), thereby, millions of workers must accept the novel alternation of working patterns from physical working settings to virtual backgrounds to keep their careers running (Oakman, et al., 2020). By virtue of the novel working style, numerous industries were affected all around the world, notably, higher educational sector (Arora & Chauhan, 2021). As the closures of university premises with regards to lockdown regulations, academics were advised working through digital platforms (Noh, et al., 2021). Under this troublesome circumstance, a hefty workload associated with converting module content from traditional teaching system to online lecture delivering method (Arora & Chauhan 2021), controlling students in a remote working environment, undesirable working conditions, issues adopting new technology, time management, alternation of academics' existing schedules, and social isolation led the path to exaggerate the stress levels of university lecturers while they were working

from home during the time of Covid -19 (Purawanto, et al., 2020). Notwithstanding, the new alternation of pedagogical method is a productive tool for the continuation of tertiary education, it enlarges the risk of occupational stress of university academics to some larger extent around the world (Noh, et al., 2021). Consequently, occupational stress has emerged as a grievous health issue among academics which has caused the imbalance of their physical and mental health (Giorgi, et al., 2020). Occupational stress, often known as job stress, is determined by how individuals react to certain events in the workplace. It appears with the incidents which they fail to bear physiologically and psychologically (Noh, et al., 2021). Occupational stress can be seen as a major contributor to various health problems such as anxiety, depression, insomnia, chest pain, and high blood pressure (Magnavita , et al., 2020).

To cope with the occupational stress, stress coping mechanisms such as, finding psychological support, religious practices (Gupta, et al.,2021), were utilized by the academicians during the Covid-19 period. Distinctly, female academics have become casualties of the occupational stress, since onuses of the occupation must be fulfilled in a fully digitalized, divergent manner (Noh, et al., 2021). Simultaneously, they are bound to fulfil domestic and childcare responsibilities in the WFH settings (Guy & Arthur, 2020). This issue has dramatically grown in the Sri Lankan context as, for Sri Lankan women academics, full digitized academic work is an unfamiliar experience (Rameez, et al., 2020), the domestic, and childcare responsibilities are traditionally considered as womanly tasks in South Asian countries such as Sri Lanka (Arora & Chauhan, 2021), most of them get inadequate support from their husbands while managing the work – family responsibilities (Vithanage & Hewapattu Arachchige, 2020), and during the time of crisis, they have less

likelihoods to pay attention to their emotional and spiritual benevolence because they primarily care about their family needs (Kalsoom, 2021).

## **2. Methodology**

A deductive mixed research approach was followed for this study, where the study population comprised of 3597 female academics, representing both state and non-state universities in Sri Lanka. A total of 348 female academics were selected for the study using multistage stratified sampling.

For the quantitative data collection purpose, a stress measuring instrument called OSI questionnaire by (Suleman, et al., 2018), was utilized with few minor modifications to line up with the covid-19 pandemic situation. Data were gathered by using a cross sectional survey comprised of 46 items by using a ten-point Likert scale rated from very strongly disagree to very strongly agree which was distributed via google forms. In-depth interviews were conducted to gather the qualitative data for the research. A sample of 12 academics was randomly chosen of those who participated for the survey. The interviews were held over the phone and via zoom which was lasted for 15 to 20 minutes. An initial pilot survey was also carried out using 30 female academics from both state and non-state universities, where minor adjustments were done to the questionnaire based on their feedback.

The entire quantitative analysis of the research was based on the descriptive statistics, which was mainly applied for measuring the stress levels with the participant's demographics, and to identify the most stress contributing factor among female academics. Descriptive statistics were utilized to analyze how the occupational stress levels varied among female academics, including, employment, marital status, and online delivery experience by using

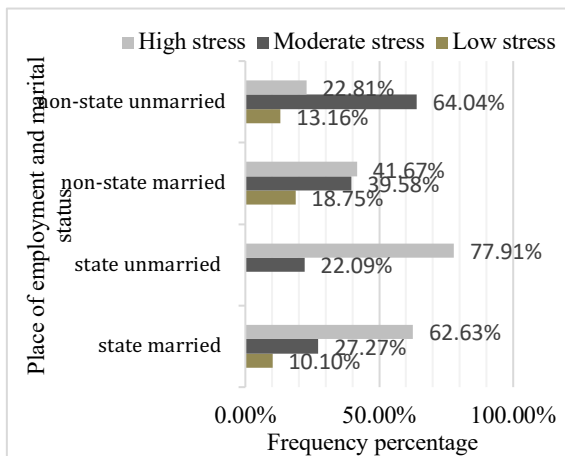
graphical representations of frequencies, and percentage tables. Thematic analysis was carried out as the qualitative analytical technique of the research, with the objective of identifying the stress coping mechanisms used by the female academics during the WFH period. To obtain valuable and meaningful results, authors transcribed all the recorded interviews and explored for themes.

### 3. Results

#### A. Reliability results

Researchers used a reliability test to interpret the ability of the questionnaire to provide accurate information for the analysis. Cronbach's Alpha test was applied to calculate the reliability of OSI. The following table shows the average of internal consistency (Cronbach's Alpha) of the study.

Table 1. Cronbach's alpha value of the OSI questionnaire



Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.965	0.958	46

Source: Author's calculations

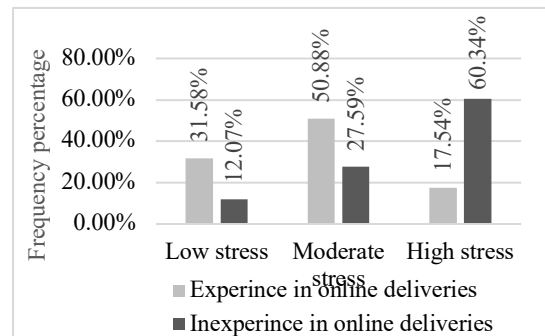
Therefore, the analysis reveals that the overall internal consistency reliability (Cronbach's Alpha) of OSI was calculated as 0.965 which confirms that OSI is a reliable research instrument for measuring occupational stress.

#### B. Statistical analysis

According to a computed stress score range, researcher's categorized three stress levels, and entire quantitative analysis was based on this categorization. Therefore, three levels of stressors and their score ranges were identified. Including, score range between 1-4 referring to low stress, score range between 4-7 referring to moderate stress, and score range between 7-10 referring to high stress.

#### C. Occupational stress distribution among state and non-state universities with referring to marital status

Figure 1. Occupational stress distribution among state and non-state universities with referring to marital status Source: Author's compilation



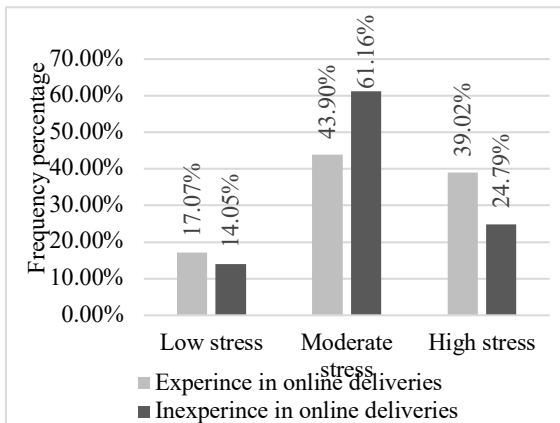
It demonstrates that 77.91% of unmarried female academics from state universities represented significant level of high stress with comparing to the married females from state universities.

On the other hand when considering the non-state universities, 41.67% of married females

experienced highest level of stress compared to the unmarried females from non-state universities. Therefore, out of the total sample, highest level of occupational stress has been reported from the state universities other than the non-state universities, and most of the female academics from non-state universities has been moderately stressed due to the sudden online transition, and out of that moderate stressed academics, most of the females were unmarried.

*D. Occupational stress distribution by online delivery experience of state and non-state female academics*

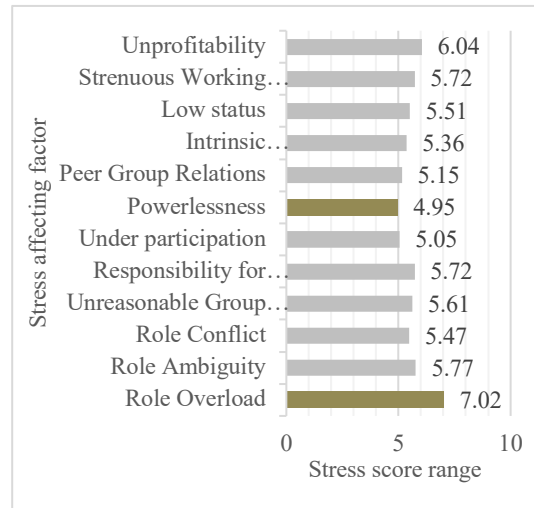
Figure 2. Occupational stress distribution by online delivery experience of state female academics



Source: Author's compilation

As the graph implies above, highest level of stress were encountered by the female academics who did not have any experience about online lecture delivering processes before (60.34%), other than the female academics who had experienced in online delivering's previously (17.54%).

Figure 3. Occupational stress by online delivery experience of non-state female academics



Source: Author's compilation

On the other hand, considering the non-state universities, according to the Figure 3. Occupational stress by online delivery experience of non-state female academics, 61.16% highest number of female academics from non-state universities were moderately stressed due to the unfamiliarity of online teaching method. However, with referring to the female academics who had previous experience of online delivery activities, 39.02% of female academics were encountered highest level of occupational stress compared to the female academics who did not have any online delivery experience previously (24.79%). Furthermore, it can be concluded, 60.34% of state female academics who were experienced highest level of stress due to the inexperience of online deliveries than the female academics who had not previously experienced online deliveries from non-state universities.

*E. Factors affecting to occupational stress of female academics of state and non-state universities*

Figure 4. Stress affecting factors distribution of female academics

Source: Author's compilation

It demonstrates a diverse distribution of stress affecting factors among female academics of state and non-state universities. Those 12 stress factors were adopted from the OSI questionnaire. According to the above mentioned stress score ranges, the highest level of stress affecting factor reported as role overload which was represented as 7.02, and lowest stress contributing factor reported to the powerlessness which was 4.95. Furthermore, all the other 10 factors has reported as moderate level of contribution of this study.

#### *F. Thematic analysis*

##### Method

Twelve participants were randomly chosen for in-depth interviews by considering the data given by female academics in the online survey. Out of the 12 participants, six were from state and other six were from non- state universities. The interviews were conducted to identify stress coping mechanisms used by female university academics while WFH during the time of Covid-19 crisis. Thematic analysis was utilized for creating a crystal-clear grasp on stress coping mechanisms of university female academics. All interviews were recorded, manually transcribed.

The transcribed responses were explored with inductive method of thematic analysis. Ergo, 'bottom - up' approach was used by allowing the data generate themes in the place of matching the data to prevailing principles (Young, et al., 2018). The six-step process mentioned by Braun and Clarke was used for data analysis (Young, et al., 2018). Five main themes were unearthed from the analyzed

interview transcripts: (1) physical, (2) cerebral, (3) creative, (4) communal, (5) psychological. As well as one of the major themes "communal" was divided into two sub themes as virtual and authentic.

##### Physical

A substantial tendency to utilize coping techniques which are associated with physicality is obviously visible among both state and non-state university participants, e.g. "I did gardening for giving some relaxation for my mind as well as eyes", "engaged in cultivation", "I tended to do workouts", and "exercise". Most of the respondents specified "yoga" as one of their stress coping strategies while WFH.

##### Cerebral

Most of the interviewees from private universities reported one of their coping mechanisms was "cerebral" which assisted to grow IQ and the ability of concentration, e.g. "I read books" and "learned to prepare food". Whereas the response of one public university participant: "I did puzzle games between lectures with students" was distinguishing as uncommon one.

##### Creative

The frequency record upon "creative" coping techniques was obtained by state university respondents, e.g. "I wrote books with my friend by discussing things via zoom", "I create new clothing and bedsheet styles" and "I made new foods using u tube video". In here, for participants' "creative" coping techniques, there was a considerable priority to get the assistance of new technology.

##### Communal

The "communal" stress coping mechanisms were focused on socialization. It derived two sub themes: virtual and authentic.

### Virtual

Many interviews from non-state universities declared that they used virtual platforms to make social connections stable in the WFH environment during Covid-19 period, e.g., “participated zoom sessions to chat with others”, “I used social media platforms to chat with others” and, “formal WhatsApp group to chat with other employees at university”.

### Authentic

While private university respondents stated “virtual” for social connection, state university had desire on authentic communication methods to cope with stress, e.g., “chatting with family members”, “I spend teatime with family members in the garden” and “I went day out with family to enjoy in weekend”

### Psychological

Out of all five main themes, the least frequency from both state and non -state university interviewees were reported under the theme “psychological”. Amongst 12 participants only 2 were mentioned on those psychological stress coping strategies, e.g., “practice religious things”, “listen Bana programs”, “listening to stress relaxing music”, and “watched a movie to avoid fatigue”

## 4. Discussion

The present study was conducted to investigate the occupational stress and WFH experience among university female academics in Sri Lanka due to the Covid-19 pandemic. Quantitative and qualitative research techniques have been used to investigate the occupational stress among university female academics. This study revealed that 77.91% of unmarried female academics from state universities represented highest level of occupational stress other than the unmarried female academics from non-state universities. On the other hand, 60.34%

of respondents from state universities had been experienced highest level of stress due to the inexperienced of online deliveries previously. Information gathered through the interviews from state female academics indicate that, since the online teaching method was not practiced before, it became harder for adapting to the sudden digital transition. Same results shown by the Ghasemi, et al. (2021), demonstrates that the brand new technologies used for recorded, and uploaded lecturers in a regular manner had been more frustrated among the academics. Therefore, this inexperience of online delivering and WFH concept had played a major role of creating a huge burden among academics during the pandemic (Molino, et al., 2020).

Furthermore, present study explored that role overload as the highest stress contributing factor among the female academics. The similar results were presented by Christian, et al., (2020) investigated that workload of the academics were significantly increased during the pandemic and it’s directly impacted for the teachers performances. The interview results indicate that, time taken to get practiced and familiar with the new working platform has been an additional work for most of the academics, which was increased their daily workload. The same idea was presented by Zeeshan, et al., (2020) found that training sessions conducted for practicing this new online teaching mechanisms has directly lead to increase some extra responsibility of the academics life. Furthermore, Gupta, et al., (2021) investigated most significant stress factors among hospitality and tourism lectures during the pandemic, by using frequencies and percentage distribution tables. According to that study, feeling of working all the times, irregular working hours and significant stressors were found out of the increasing the academic workload during the pandemic (Gupta, et al., 2021).

The thematic analysis which was utilized to identify stress coping mechanisms of female university academics was derived fruitful outcomes as we hoped by disclosing five main themes: physical, cerebral, creative, communal and psychological. As well as one of main theme 'communal' was categorized into two sub themes as virtual and authentic. Some consequences are in line with past investigations, whereas most of them are novel and specific to the female university academics. The present study evidently pinpoints those respondents from both state and non-state universities in Sri Lanka are frequently utilize 'physical' stress coping mechanisms out of other stress coping mechanisms. These findings are aligned with the results of the study Gupta, et al., (2021) in India. Whilst it is considered on 'cerebral' stress coping mechanisms, doing puzzle games between lectures with students has drawn as a unique strategy among female university academics in Sri Lanka. A propensity of obtaining assistance of new technology in light of 'creative' stress coping strategy is distinguished prominently among state university participants. The usage of 'psychological' stress coping strategy is minimum amongst both state and non-state university participants. The results are parallel to the study findings of (Zvada & Thomas, 2019). The consequences of community oriented coping strategies of female academics are visible as timely distinctive, in account of they were caged inside four walls in their homes with the lockdown regulations during that time, Hence virtual and authentic techniques are used by them to cope with occupational stress.

## **5. Conclusion**

The primary goal of this research was to investigate the occupational stress and WFH experience among university female academics during Covid-19 pandemic. While

quantitative and qualitative techniques have been used to investigate the occupational stress levels, stress affecting factors and the coping strategies used by the female academics, only a few number of researches have been conducted for investigate the occupational stress in Sri Lankan context. According to the analysis results of the present study, unmarried female academics from state universities experienced highest level of occupational stress than the married female academics. However, it should be highlighted that, both married and unmarried academics are should be considering to investigate the impact of the occupational stress under the WFH environment. Furthermore, current study explored that female academics from state universities had been encountered highest level of stress due to the inexperience of the online delivery previously, with compared to the female academics who have been practiced online teaching methods before. Based on the quantitative results of the study, role overload has reported as the most stress affecting factor among the female academics. According to the findings of thematic analysis, five main themes were emerged: physical, creative, cerebral, and communal and psychological. In here, high frequency record was obtained by physical stress coping mechanism while lowest frequency record was obtained by psychological stress coping strategies from both state and non-state university female academics. Based on the findings and conclusion, it was recommended that, results should be beneficial for the Sri Lankan higher education sector and the state and non-state universities for policymaking's and formulating strategies for stress reduction management of the female academics. Therefore, they can implement and perform their work more effectively.

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## Abbreviations



OSI = Occupational Stress Index  
WFH = Work From Home

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