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# COVID-19 led work environment disruption in India and its impact on the workers' mental wellbeing

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**Abstract**---Amidst the disruption of the Coronavirus pandemic the lockdown was established to curb the spread of the disease, resulting in an indirect effect on the well-being of the general populace. For working professionals, who were forced to shift to e-working from home, the home confinement, isolation and disruption of daily routine

reinforced new occupational stressors which lead to a rise in reporting of anxious tendencies related to Covid-19. This study is designed to assess the impact of the Covid-19 pandemic on the mental wellbeing of remote e-workers. The study opts for a survey-based research and measures anxiety related to Covid-19 and job stress through Covid-19-related Anxiety Stress (CAS-7) and new Job Stress Scale (JSS-22) standardized instruments. For a sample of 79 respondents, a moderate Covid-19 related anxiety and Job Stress was observed. The mean score for the CAS was  $18.31 \pm 3.46$  indicating a moderate Covid-19 related anxiety. Further, a noticeable trend was observed in the subscales of the Job Stress Scale where mean Job Stress was  $12.32 \pm 3.87$ ; and Role Expectation Conflict was  $13.86 \pm 4.87$ . Coworker Support was  $15.92 \pm 4.54$  and for Anxiety the score was  $12.39 \pm 5.15$ . The overall results of job stress scale indicate a moderate occupational anxiety and stress. Age, gender and the work experience are seen to have varied impacts on the anxiety and stress in e-workers. The study adds support to extending the literature that emphasizes implementation of policies for an improved mental and psychological well-being in the situation like COVID-19 pandemic and in such future disruptive events.

**Keywords**--Remote e-working, Work from Home, COVID-19 pandemic, Job Stress, COVID-19 Related Anxiety, Job Stress Scale, Work-Life Balance.

## 1 Introduction

The Coronavirus pandemic exposed ordinary people to extraordinary conditions that they had never encountered before. It created an era of 'remotely anywhere', which has led to the evolution of a new workplace, from a physical space to residing and working in a virtual world. Although the concept of virtual workplaces had been growing over the years the sudden unprecedented shift from physical to online work environments due to Covid-19 lockdowns was not met particularly well. Infrastructural challenges became common and the sudden lag in working contributed to the already fragile situation of home confinement. This introduced newer, highly dynamic stressors among the working population.

Work-related or job stress can be defined as “the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope” (Leka et al., 2004). It is one of the major stressors affecting mental health in employees. Job stress is caused by different sources such as inadequate tools, job insecurity, etc., which have been recurring problems during the pandemic (Savić, 2020). Another important stressor is Role Expectation Conflict (REC), which occurs when requests are made of employees that are unsuited to fulfill them, to the point where complying with the requests becomes difficult. Conflict can also be caused when employees are in disagreement about the expectations which a particular role may entail. This may cause a “work pressure effect on work-life balance” (Idris, 2011). Anxiety is another work-related stressor that can be identified by

symptoms such as “feelings of tension, worried thoughts and physical changes like increased blood pressure” (American Psychological Association, 2019; Xi, 2020). Stress and anxiety are related and work stress is shown to increase diagnosable anxiety in otherwise healthy workers (Melchior et al., 2007).

Stress and anxiety are natural responses to situations like the recent pandemic. Anxiety, for instance, is a natural reaction to something uncertain (Rycroft, 2018), and this pandemic was the most uncertain time that people have lived through. Multiple factors such as fear of job loss, fear of infection, uncertain future and economic burden among others are contributing to this anxiety and stress. Stress among employees is not something new. Stress at the workplace was a major concern earlier too; however it has been more prevalent during the pandemic.

Within a short span of time Covid health emergency changed the nature of work. Such a situation was never faced in recent times and it is going to lead to the modifications in workplaces across institutions. A new normal seems to be evolving in workplaces. People used to build personal relations when they work in physical proximity to other coworkers. Such personalized workspace and the bonding with others provided the sense of belonging and the feeling of satisfaction. With all that gone and a sudden thrust towards e-working, there has been a certain distress in remote e-workers. Through this study, we focus to assess nature and degree of this distress experienced by people working remotely during Covid-19 in India.

### **Remote E-working and Work from Home (WFH)**

E-work refers to the use of information and communication technologies (ICT) rather than travelling to work (Beño & Ferenčíková, 2019). The teleworking has its roots in 1980s (Bussing, 2002) and since then the advances in information and communications technologies have made it possible to work from anywhere and at anytime (Grant et al., 2013). This made it possible for both semi-skilled and high skilled workers to deliver their duties without visiting the physical offices. So, working from home or anywhere outside the office, is not the concept that emerged during the Covid-19 pandemic; it has been tried earlier by many companies to enhance productivity of their employees (Lewis & Cooper, 2005). Working remotely has advantages and disadvantages for both the employers and employees but it is found that in general the advantages of e-working outweigh its disadvantages (Harpaz, 2002). Despite having many advantages, however, remote e-work or flexible working is not expected to suit everyone (Beño, 2021; Crosbie & Moore, 2004).

The remote e-working and the work from home during the coronavirus pandemic and the associated lockdowns is different from the normal times as it was forced rather than voluntary. People had to shift to online offices without any basic training of the new digital workspaces. Savić, (2020) observes that during the pandemic since work from home eventually became unavoidable the process of quickly developing and deploying new work models took precedence in organizations. Words and phrases like “telecommuting, teleworking, working from home, working at home, working remotely, virtual work, e-work, e-commuting, mobile work, flexible workplace, digital nomads, and freelancing” were used to

label and chronicle the work models and to initiate the process of “digital transformation of the workforce” (Savić, 2020). The ideas and innovative solutions of Industry 4.0 became a remedy to the disruption caused by coronavirus.

Work from home during the coronavirus pandemic was associated with lockdown and restrictions on the movement. So, the abrupt move to e-working caused multiple roles to be suddenly imposed on remote e-workers, since many upper and middle class employees now had to take care of their households and children in the wake of the closure of educational institutions as well as the absence of housekeeping staff (Jaiswal & Arun, 2020; Shareena & Shahid, 2020). Teleworking during Covid lockdown had potentially amplified the “risk of blurring of boundaries between work and home time due to the multiplication of non-work-related tasks such as caring for children and facilitating home schooling” (Bouziri et al., 2020).

Quite a few studies were carried out during this period to understand the impacts of Covid induced e-working. There was increased productivity while working from home and an adequate work-life balance among the majority of participants who worked in information technology industry and other private sectors (Kaufman & Taniguchi, 2021; Pant & Agarwal, 2020; Singh & Kumar, 2020). While working from home in isolation many people got ample time to discover their creative side (Jaiswal & Arun, 2020). Work from home has also been found to improve the overall job satisfaction, as was found by Kaufman & Taniguchi (2021).

On the other hand there are the researches that have highlighted the sentiments of anger, sadness and loneliness in private sector employees (Pant & Agarwal, 2020). Problems of mental health were also brought out by Roy et al., (2020). Not only the mental health but there was overall deterioration of physical wellbeing due to various factors associated with work from home (Marimuthu & Vasudevan, 2020; Xiao et al., 2021). Work from home reduces coworker support, job security and advancement opportunities as well as induces sense of disengagement, alienation and communication gap (Kaufman & Taniguchi, 2021; Singh & Kumar, 2020). All these issues associated with work from home eventually reduce productivity levels while increasing the stress among employees (Jaiswal & Arun, 2020).

It is obvious from the above discussion that there are mixed findings and conclusions concerning the e-work and work-from-home and its impacts during the pandemic. There is a need to have more in-depth data-based researches to bring out and understand the impacts that Covid-19 imposed disruption in work environments have on the mental health of the remote e-workers. This study is an attempt towards that end, using new Job Stress Scale (JSS-22) and Covid-19-related Anxiety Scale (CAS-7) which have been found to be effective, efficient and valid tools for Indian populace (Chandu, Pachava, et al., 2020; Shukla & Srivastava, 2016).

## **Aims & Objectives**

The main aim of this paper is to assess the impact of e-working on the mental health of remote e-workers during the Covid-19 pandemic and the subsequent lockdowns in India. The specific objectives are:

1. To assess the job stress caused in remote e-workers.
2. To measure the Covid-19 related anxiety that remote e-workers faced during the pandemic.

## **Methodology**

A cross-sectional survey was conducted through online mode using Google Forms application, using convenience sampling method. The survey was made available in English language and it was administered first on 12th November 2020. The data was cleaned and organized in an excel sheet format before exporting the same to IBM SPSS software for further analysis. People of all genders above the age of 18 years were invited to participate in the survey. A link was sent through e-mail as well as shared in groups on social media (e.g., WhatsApp, LinkedIn). Consent to voluntarily participate in the survey and the permission to publish the survey results was taken from all the respondents. Although the questionnaire was shared with more than 500 people the response was not as expected. The study was time bound so the questionnaire was closed on 15<sup>th</sup> December 2020. The data was cleaned and organized for the further analysis. Not all respondents were considered for the study keeping in view the objectives. Inclusionary and exclusionary criteria were used to finalize the data for further analysis.

***Inclusionary Criteria:*** Following criteria were used to select the participants:

- Participants must be between the age of 20 and 59.
- Participants should be employed full-time for at least 2 years and must have e-worked in the past six months.
- The participants should not have reported any serious mental ailments in the past.

***Exclusionary Criteria:*** Following criteria were used to exclude the participants from the study:

- Individuals who had not consented for sharing their data.
- Foreign Nationals (Non-Indians).
- Individuals who have not worked full-time for at least two years.
- Individuals who did not e-worked in the past six months.
- Individuals with a history of severe mental ailments.

***Sampling Technique:*** Convenient sampling, which is a type of non-probability sampling, is the primary sampling technique used here.

***Ethical Permission:*** Consent was taken from all participants by the means of an Informed Consent Form which the participants agreed to prior to participation in the survey.

## **2 Materials and Methods**

The survey questionnaire used standardized instruments namely the Covid-19 Anxiety Scale (CAS-7) which is a short seven item scale developed to assess Covid-19 related anxiety among different demographic groups and sub-groups of people (Chandu, Marella, et al., 2020). The scale is reliable and has been validated in the Indian context (Chandu, Pachava, et al., 2020). CAS assesses Covid-19 related anxiety in two dimensions: 'fear of social interaction' and 'illness anxiety'(Kar et al., 2020). The latter instrument utilized is the new Job Stress Scale (JSS-22), which is a newly developed tool to assess the self-reported occupational stress in context of five different sub-scales namely Time Stress, Anxiety, Role Expectation Conflict (REC), Coworker Support (CWS) and Work-Life Balance (WLB) (Shukla & Srivastava, 2016). The instrument consists of 22 items, has excellent reliability and has been validated in the Indian Context. The need of using these tools arises from identifying the new socio-psychological and economic stressors emerging in the Covid-19 pandemic which renders a need to use constructs to assess a situation among remote e-workers facing issues in job stress and anxiety induced by Covid-19 pandemic.

### ***Study Design***

This study followed a cross-sectional design. A descriptive statistical analysis approach was undertaken to bring out the results. Given the standardized instruments used namely CAS and JSS both have a defined range and set of variables, the overall score for the scales of each respondent was computed and the mean scores of the scales were analyzed using SPSS.

In order to effectively design a survey research, several research questions were framed to develop the questionnaire and put the results in perspective of the overall goal. The research questions developed for current study are as followed:

- Was Covid-related anxiety reported among remote e-workers?
- Did remote e-workers experience time stress while e-working during the Covid-19 lockdown period?
- Was anxiety reported among remote e-workers while e-working during the Covid-19 lockdown period?
- Did remote e-workers experience role expectation conflict while e-working during the Covid-19 lockdown period?
- Did remote e-workers report having coworker support during the Covid-19 lockdown period?
- Did remote e-workers report having work-life balance during e-working?

### **Demographic Information of Respondents**

The survey made it optional for the respondents to submit their demographic data, and the following data was obtained. For the purpose of this study emphasis was put on the four demographic characteristics viz. gender, age, marital status and work experience (Fig 1).

All of the 79 respondents chose to provide data on their gender. 74.7% respondents identified as males while 25.3% identified as females. No respondents preferred to identify as 'other' gender. 30 respondents (about 38%)

fall in the age group of 20-29 years; 21% belonged to the age group of 30-39 years; about 14% depicted their age between 40 and 49 years; and 27% of respondents were from the age group of 50-60 years. The mean age distribution of the respondents is  $37.21 \pm 12.960$ . As for the marital status, 76 respondents of the total 79 chose to provide data. 53.9% of the respondents were married, 43.4% were single, and 2.7% reported death of their spouses or separation. No respondent reported being divorced. 78 respondents out of the total 79 provided data on their work experience. 32.1% reported over 20 years of work experience, and a similar 32.1% reported 2-5 years while 15.4% reported 11-15 years and 15.4% reported 5-10 years of work experience. Another 5% reported 16-20 years of work experience.

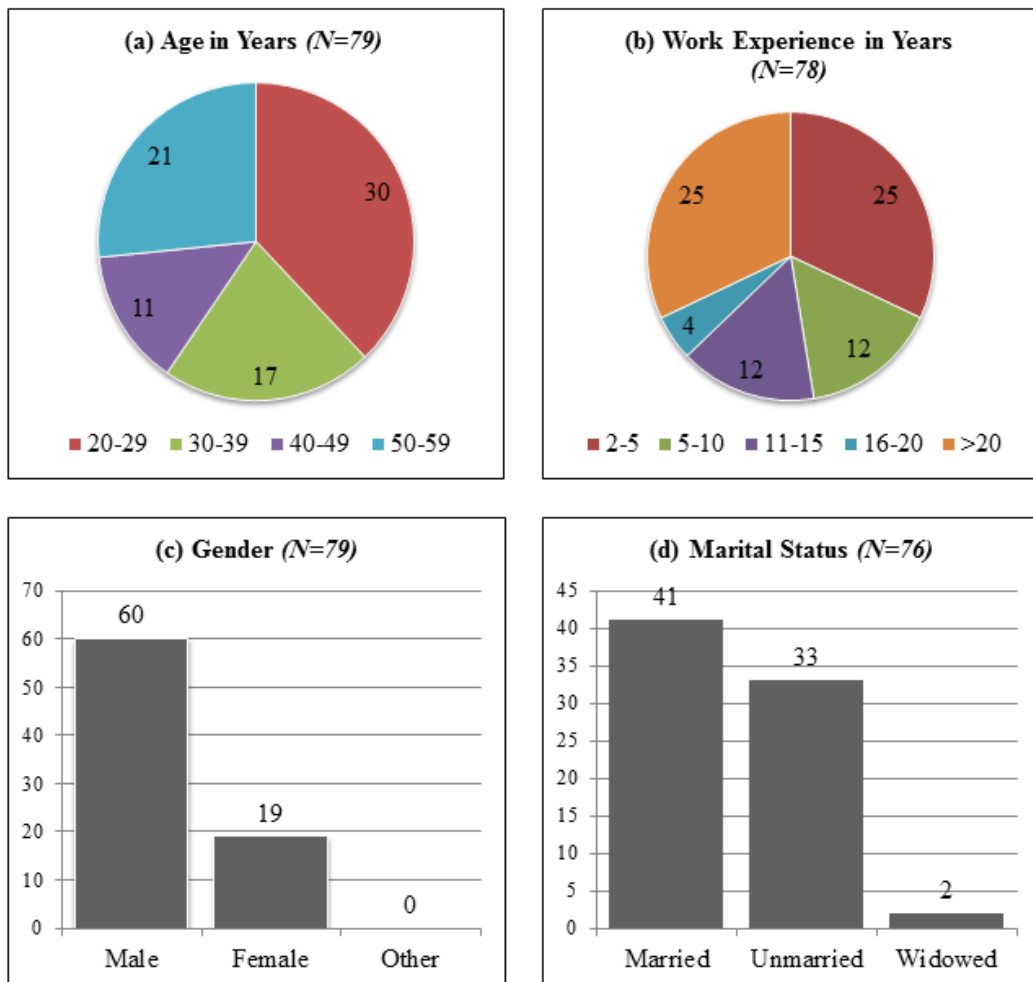


Fig. 1 Demographic characteristics of respondents

### 3 Results and Discussions

The questionnaire attempted to get the responses on six indicators viz. Covid-19 related Anxiety Stress (CAS); Time Stress (TS); Anxiety (AN); Role-Expectation

Conflict (REC); Co-worker Support (CWS) and Work-Life Balance (WLB). Covid-19 related anxiety is measured by 7 items rated on a (1-4) Likert scale. Time Stress and Anxiety were measured under the 9 items of the Job Stress subscale on a (1-5) Likert scale. Role-expectation conflict was measured by a 5 item subscale rated on (1-5) Likert scale. Coworker support is assessed at four-items in the scale and the ratings are based on a (1-6) Likert scale. Work-life balance is assessed by four-items on the new job stress scale by the rating (1-5) and the factors indicative of the subscale are job characteristics, external commitments, and responsibilities, among others. Table 1 shows the t-scores of the variables i.e., stress indicators in this case.

The mean score for the CAS among e-workers was  $18.31 \pm 3.46$  indicating a moderate Covid-19 related anxiety. The findings suggest 69.62% of the respondents reported moderate Covid-19 related anxiety. It is observed that the age or work experience has no significant relation with the Covid-related anxiety ( $r=0.018$  and  $r=0.073$  respectively) thereby showing that covid-19 affecting people of all age groups almost equally and it affected the everyone the same way irrespective of how long they had been working.

Table 1: T-Scores of stress indicators

	Stress Indicators					
	TScore_CAS	TScore_TS	TScore_AN	TScore_REC	TScore_CWS	T-Score_WLB
Valid	79	79	79	79	79	79
Missing	0	0	0	0	0	0
Mean	18.31	12.32	12.39	13.86	15.92	12.62
Std. Deviation	3.46	3.87	5.15	4.87	4.54	3.29
Minimum	11	4	5	5	4	4
Maximum	27	20	25	23	24	20

*CAS = Covid-19-related Anxiety Stress; TS = Time Stress; AN = Anxiety; REC = Role Expectation Conflict; CWS = Coworker Support; WLB = Work-life Balance*

Further, findings suggest that participants experience time stress while e-working, albeit for a majority of 74.68% it is moderate with a mean score of  $12.32 \pm 3.87$ . Anxiety, another important factor in the overall job stress scale, was reported at moderate levels by the participants. The mean score for anxiety was  $12.39 \pm 5.15$ .

Role-expectation conflict is connoted by the organizational structure, role requirements, and relationships. The findings indicate that about 65.82% of the participants report moderate conflict, with a mean score of  $13.86 \pm 4.87$ , role conflict was found to be higher in younger respondents in contrast to the experienced, older respondents.

Coworker support usually can be inferred from the communication flow and organizational climate. The subscale is reverse coded as per the normative guidelines and the findings indicate 64.56% of the participants received moderate

support with the average score of  $15.92 \pm 4.54$ , more experienced and older individuals were found to receive more coworker support.

Work-life balance is assessed by four-items on the new job stress scale by the rating (1-5) and the factors indicative of the subscale are job characteristics, external commitments, and responsibilities, among others. The findings suggest 75.95% of the participants experience a moderate work/life balance and the mean score of  $12.62 \pm 3.29$ , further establishes that experienced and older participants were found to maintain their work-life balance more effectively.

### **Age-Wise Analysis**

The mean age distribution of the respondents is  $37.21 \pm 12.960$ . Age was taken as an independent variable and was compared to the job stressors reported among the respondents (Table 2).

Table 2: Age-wise average of stress indicators

Age Group	Stress Indicators					
	CAS Average	TS Average	AN Average	REC Average	CWS Average	WLB Average
20-29	18.11	12.31	13.31	14.27	16.07	12
30-39	18.64	12.65	11.29	12.82	13.94	12
40-49	18.54	11.72	12.1	13.72	16.18	13.27
50-59	18.19	12.38	12.09	14.19	17.19	13.66

*CAS = Covid-19-related Anxiety Stress; TS = Time Stress; AN = Anxiety; REC = Role Expectation Conflict; CWS = Coworker Support; WLB = Work-life Balance*

Covid-19 related anxiety is a central stressor to this research, since multiple studies link the onset of the pandemic to a rise in mental ailments, both due to the fear of the virus itself, as well as an “information epidemic” (Roy et al., 2020). The findings of this research indicate that the age group of 20-29 recorded the least mean Covid-19 related anxiety score at 18.11 which is close to the mean of the age group of 50-59 at 18.19, while the adjacent age group of 30-39 recorded the highest mean anxiety score at approximately 18.64. The age groups 40-49 recorded a mean score of 18.54.

Among the work-related stressors, Time Stress is one of the most prominent, requiring factors such as inadequacy of resources and insecurity in order to manifest itself. The findings suggest that the age group of 30-39 recorded the greatest mean job stress score of approximately 12.65, while the age group of 40-49 recorded the lowest, of approximately 11.72. The age group of 20-29 recorded a mean score of 12.31, while the age group of 50-59 recorded a mean score of 12.38.

Anxiety is another work-related stressor that can be identified by symptoms such as “feelings of tension, worried thoughts and physical changes like increased

blood pressure” (American Psychological Association, 2019; Xi, 2020). The data suggests that the age group of 20-29 recorded the highest anxiety mean score of 13.31, whereas the age group of 30-39 recorded the lowest score of 11.29. The age group of 40-49 and 50-59 recorded the mean score closer to each other of 12.1 and 12.09 respectively.

Another work-related stressor is role expectation conflict, which manifests due to conflicting and/or inconsistent requests and expectations imposed on employees. The data suggests that the age group of 20-29 recorded the highest mean role expectation conflict score of 14.27, while the age group of 30-39 recorded the lowest score of 12.82. The age group of 40-49 reported a mean score of 13.72 while the age group of 50-59 recorded a mean score of 14.19.

Coworker support is an important work stressor that may be sourced from colleagues, coworkers and sometimes even the organizations and may mitigate issues such as stress, and conflict. The data suggests that the age group of 50-59 recorded the highest mean coworker support score of 17.79, while the age group of 30-39 recorded the lowest score of 13.94. The age group of 20-29 reported a mean score of 16.07 while the age group of 40-49 recorded a mean score of 16.18. Work-life balance is another stressor that denotes the equilibrium between the demand of the remote e-worker’s job and the demands of their personal lives. The data suggests that the age group of 50-59 recorded the highest mean work/life balance score of 13.66, while the age group of 20-29 and 30-39 recorded the lowest and same score of 12. The age group of 40-49 reported a mean score of 13.27.

The ANOVA analysis with age group as the predictor and different stress indicators as the outcomes did not show any significant variance between groups.  $F(3, 20) = 0.19, p > 0.05$

### ***Work Experience***

In addition to age, work experience was also taken as an independent variable and compared to job stressors reported by the respondents (Table 3).

Findings indicate that the group with 2-5 years of job experience recorded the least mean Covid Anxiety Stress (CAS) score at 17.68 which is close to the mean of the group reporting 16-20 years of work experience at 17.75. The group that reported 5-10 years of work experience recorded the highest mean CAS score at 18.83. The groups reporting 11-15 and more than 20 years of work experience scored close, with mean CAS scores of 18.75 and 18.52 respectively.

Further, it is observed through comparison with Time Stress (TS) that the group reporting 5-10 years as their work experience has the least mean score of 10.58. On the other hand, respondents that reported work experience of 11-15 years show the highest mean Time Stress at 13.75. The groups that reported 2-5 years or 16-20 years of experience reported almost similar mean Time Stress scores of 12.56 and 12.75 respectively, while the respondents having more than 20 years of experience reported a mean score of 12.12.

Table 3: Work-experience and average of stress indicators

Work Experience	Stress Indicators					
	CAS Average	TS Average	AN Average	REC Average	CWS Average	WLB Average
2-5	17.68	12.56	13.24	14	15.8	11.64
5-10	18.83	10.58	11.58	14.25	13.41	12.16
11-15	18.75	13.75	11.91	12.75	16.83	13.25
16-20	17.75	12.75	13.75	15.25	14.5	13
>20	18.52	12.12	12.12	13.92	17.12	13.52

*CAS = Covid-19-related Anxiety Stress; TS = Time Stress; AN = Anxiety; REC = Role Expectation Conflict; CWS = Coworker Support; WLB = Work-life Balance*

In regards to comparison with the stressor Anxiety (AN), the findings show that the group with 16-20 years' experience recorded the highest mean score of 13.75, while those with 5-10 years' experience recorded the lowest score of 11.58. The group with 11-15 years' experience reported a similar mean score to the lowest, scoring 11.91, while those with 2-5 years' experience came closer to the highest with a mean anxiety score of 13.24. Respondents with more than 20 years of work experience reported a mean anxiety score of 12.12.

The data further reveals in relation to comparison with the scores for Role Expectation Conflict (REC) that respondents with 16-20 years' work experience score the highest at 15.25, with respondents having 11-15 years' experience scoring the lowest at a mean REC score of 12.75. Respondents with 2-5 or 5-10 years of work experience reported similar amounts of role conflict with respective scores of 14 and 14.25. Those with more than 20 years of work experience, on the other hand, reported a mean REC score of 13.92.

The findings of comparison with Coworker Support scores indicate that respondents with more than 20 years of work experience reported the highest mean score at 17.12. On the other hand, the respondents with 5-10 years of experience reported the lowest mean score on this stressor at 13.41. Those with 2-5 years' experience reported a mean score of 15.8 while those with 16-20 years of experience reported a mean score of 14.5. Respondents with 11-15 years of experience reported a mean coworker support score of 16.83.

Lastly, when compared to scores for Work-Life Balance, the group reporting more than 20 years of work experience again scored the highest, with a mean score of 13.52, with respondents having 11-15 or 16-20 years' experience coming close with their respective scores of 13.25 and 13 respectively. On the other hand, the respondents with 2-5 years of work experience scored the lowest, reporting a mean score of 11.64, while those with 5-10 years' work experience reported a mean work-life balance score of 12.16.

The ANOVA analysis with 'work experience' as the predictor and different stress indicators as the outcomes did not show any significant variance between groups.

$$F(4,25) = 0.21, p > 0.05$$

### **Gender-wise Analysis**

Finally, scores for the stressors assessed for the study were compared to the gender demographics of the respondents, and the following observations were obtained (Table 4).

Table 4: Gender and average of stress indicators

Gender	Stress Indicators					
	CAS Average	TS Average	AN Average	REC Average	CWS Average	WLB Average
Male	18.53	11.96	12.48	13.4	15.66	12.51
Female	17.57	13.47	12.1	15.31	16.73	12.94

*CAS = Covid-19-related Anxiety Stress; TS = Time Stress; AN = Anxiety; REC = Role Expectation Conflict; CWS = Coworker Support; WLB = Work-life Balance*

Male respondents scored higher than their female counterparts on mean Covid Anxiety Stress (CAS) and Anxiety (AN) as a part of Job stress, with scores of 18.53 and 12.48 respectively. On all other stressors, men score less than women, reporting mean Time Stress (TS) at 11.96, mean Role Expectation Conflict (REC) at 13.4, mean Coworker Support (CWS) at 15.66 and mean Work-life Balance (WLB) at 12.51.

Female respondents, as mentioned above, scored higher on all stressors than male respondents except for Covid Anxiety Stress (CAS) and Anxiety (AN), in which they scored 17.57 and 12.1 respectively. For Time Stress (TS), Role Expectation Conflict (REC), Coworker Support (CWS) and Work-life Balance (WLB), their scores were 13.47, 15.31, 16.73 and 12.94 respectively.

### **Discussion**

In the present study, we set out to assess overall job stress and Covid-19 related anxiety in the current times of a global pandemic. Data was collected from a variety of professionals for this study. The findings reveal a moderate level of Covid-19 related anxiety and job stress in the population. Therefore, the Null Hypothesis ( $H_0$ ) which stated that 'there is no job stress and Covid related anxiety in the remote e-workers in India' is rejected. Alternate Hypothesis ( $H_A$ ) that there is job stress and Covid related anxiety in e-workers in India is accepted and the level of the stress and anxiety is seen to be moderate. It is noted that younger and less experienced individuals fared well on some metrics of job stress while they evidently scored low on metrics such as work-life balance and coworker support. Job stress poses adverse threats to the overall health of employees, which can lead to low motivation, fatigue, low productivity and performance, absenteeism among several other effects (Cooper & Marshall, 2013). We identified dynamic stressors and assessed them with the new job stress scale which represents five variables of occupational stress on the premise of four sub-scales namely: job

stress, role expectation conflict, coworker support and work-life balance. In the time stress component, we observed a mean score of  $12.32 \pm 3.87$ , anxiety demonstrated a mean score of  $12.39 \pm 5.15$ . Role Expectation Conflict was  $13.86 \pm 4.87$ , coworker support was  $15.92 \pm 4.54$  and work-life balance demonstrated a mean score of  $12.62 \pm 3.29$  which indicated moderate level of overall job stress in Indian remote e-workers.

These findings can be corroborated with past research in times of epidemics (Rodriguez-Rey et al., 2020; Taylor et al., 2008). As employees were confined to their homes due to frequently extending lockdowns and were regularly exposed to distressing information that induced fear and frustration, moderate levels of job stress were expected to be prevalent in a majority of the population (Verma & Mishra, 2020). We observed a relatively higher level of anxiety in younger adults which could be explained by their “proximity to contamination, information overload through social media and a poor tolerance of uncertainty” (Glowacz & Schmits, 2020). While older and more experienced respondents reported lower job stress and role expectation conflict, they indicated higher coworker support and work-life balance when compared to the younger, less experienced respondents. Previous studies have demonstrated higher social support for older adults and indicate that older adults are most resilient to mental ailments after an emergency, suggesting better abilities to maintain stressful situations (Pieh et al., 2020). As for gender differences, there is some variation observed in the results but can largely be asserted that both the genders experienced distress equally. This could be attributed to the lockdowns and the fear of getting infected by the virus, and the situation can be understood as being pervasive enough to cause distress despite the gender differences (Rehman et al., 2021). Women tend to experience relatively higher time stress and role expectation conflict which is in-line with past literature available in China (Sun et al., 2020; Wang et al., 2020).

Although speculative, women are more likely to assume the role of caregivers in the family and are also expected to complete household chores after working which might increase the distress as also noted in Gausman and Langer, (2020). Though, it is notable that women participants in our study reported higher coworker support and work-life balance than their male peers. Moreover, the moderate level of job stress could also be explained with remote working as it causes isolation, disturbance in family, erratic working hours, and lack of guidance from co-workers (Prasad et al., 2020).

As already noted, Covid-19 related anxiety is the major focus of this research, as the pandemic has been linked to poor mental health. This can be attributed to the fear of the virus and dissemination of information on social media which is now being termed as an “information epidemic” (Roy et al., 2020). The mean score for the CAS was  $18.44 \pm 3.51$  indicating a moderate Covid-19 related anxiety. The findings suggest 69.62% of the respondents reported moderate covid-19 related anxiety. These findings are largely in-line with the literature available. Zandifar & Badrfam, (2020) suggest considering the risk of catching Covid-19 as a major factor that explains “poor mental health during the pandemic”. Increased anxiety can also be linked to the lack of awareness and preparation in the general populace regarding the Covid-19 outbreak and subsequent lockdowns (Roy et al., 2020).

Further, social isolation and misinformation are considered as contributing factors. Moreover, the moderate level of Covid-19 related anxiety in Indian employees could be explained by lack of authentic information, ambiguity about the virus and low confidence in medical professionals for treating coronavirus (Rajkumar, 2020; Wang et al., 2020).

#### 4 Conclusion

COVID-19 pandemic and the associated lockdowns in India forced people to move online to work. The bedrooms were turned into office cabins and the distinctions between home and office were blurred. During this period remote e-workers had to learn new skills and communicate in new formats. This study attempted to explore the job stress and anxiety among such e-workers. The shift to remote e-working has added one extra stressor to the stress basket. There has been an overall moderate occupational anxiety and stress. This study concludes that working from home does not relieve one of the stresses of work. There is the need to monitor mental health and psychological well-being of workers whether working in offices or remotely from homes. Age, gender and experience need to be taken into consideration while attempting to resolve the issues of workers whether working remotely or in offices. This study adds support to extending the literature that emphasize implementation of policies for an improved psychological well-being in the situation Covid-19 pandemic and in future such disruptive events.

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