

Work from home during the COVID-19 pandemic; exploration of perceived stress and social support

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ABSTRACT

Background: Data was collected online from the employees working from home, for one month, during the second wave of COVID-19 pandemic from Delhi and Delhi NCR Region.

Aim: This study aimed to evaluate the perceived stress and social support mainly from the employees working from home during the second wave of the COVID-19 pandemic

Materials and Methods: An online data was collected using the Perceived Stress Scale (PSS) and The Multidimensional Scale of Perceived Social Support and a self-designed questionnaire.

Results: The mean age of the respondents was 32.3 (SD:2.8) years. Out of the total sample of 92, there was an equal number of females and males. The majority of them were married and working in Knowledge Process Outsourcing (KPO) industry.

There was a significant difference between the perceived stress and social support of males and females across the different industries of work and between the employees who were tested positive.

Hours of sleep reported to act as a buffer against the perceived stress of employees and positively correlated with perceived social support. Further, the social support of employees provided a barrier to the stress perception of the employees.

Conclusion: Working from home during the second wave of the pandemic was posing a high psychosocial risk to the employees. Their occupational demands were high with fewer resources to manage and adversities of social distancing, lockdown, dependent family members. Such situations demand flexibility and support from the organization towards the employees to mitigate this crises situation.

Keywords: Work from Home, COVID-19

INTRODUCTION

The first case of Covid-19 reported on January 30 2020, in India. After that, it got spread rapidly, and on March 11 2020, it declared a global pandemic by the World Health Organization ^[1].

It is precisely after one year that we got the second wave of the pandemic, which is four times and very difficult to manage. Most medical, political and socio-economic systems are on the threshold to collapse^[2]. This pandemic has become the most terrible and fearful health hazard to humankind's physical and mental health^[3].

This pandemic has affected every sphere of current human civilization on widespread and to humans as an individual, which are part of this current unparalleled situation. Every individual is facing physical, mental and socio-economic challenges. During this pandemic, there are ongoing economic and work challenges closely associated with an individual's health status^[4].

After the first incident and after that, continuing worldwide lockdown to prevent the spread of the COVID-19 virus has impacted the economy to a greater extent, which has further changed the occupational scenario. In the year 2020, the reopening of the business and organization has been affected and could not maintain the regular work schedules and activities. The various organization opted for work from home to sustain the business and economy^[5, 6].

There is a modern technology for communication and passing information, such as laptops, computers, android or mac smartphones, and the internet to deliver the job/work targets. It is called telework by International Labor Organization (ILO). Telework enables individuals to perform their occupational task from a remote place, i.e., outside their work/office premises^[7].

During this time many people lost their jobs, and many people from white-collar professions and the people involved in telework forced to convert their homes to their new workplace.

Studies have reported benefits to working from the comfort of home. However, it may blur the personal and professional boundaries, which can have adverse consequences on employees physical and mental health^[8]. Moreover, during the uncertain times of the COVID-19 pandemic, work from home is forced on many telework professionals, involving various factors that make the work environment very complex and demands systematic inquiry to understand the situation to have solutions for it^[8].

During occupation the stay at home and personal distancing, both found to be associated with GAD, acute stress. However, the symptom of insomnia seen in individuals following a stay at home and personal distancing behaviour was associated with intrusive thoughts. In both cases, social support was of no protection^[9]. Moreover, many studies have reported depression, post-traumatic stress and anxiety during isolation due to COVID-19^[10].

The present situations are unique due to the COVID-19 pandemic, and there is a second wave of pandemic going on in India where all the social and personal resources are depleting. Even in such situations, individuals work from home to run the economy, save their jobs, and sustain themselves financially. Under such situations, many previous studies have reported stressful effects, imbalance in work-life balance, feelings of job insecurity, high workload and unrealistic deadlines for employees^[11,12]. Given the scenario present study attempts to explore the perceived stress and social support of the employees working from home during this uncertain time due to the COVID-19 pandemic.

MATERIALS AND METHODS

On April 6 2021, there were total 1,26,789 new cases of the corona reported in one day, and out of this total, 87.59% of people died. The mortalities were reported mainly from 10 states/UTs. These are Chandigarh, Delhi, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Uttar Pradesh, and Tamil Nadu. So, these were the states gone under lockdown and COVID curfew^[13]. These are the states where most IT industry employees and employees using the teleworking system were absorbed for their employment. So, it was appropriate to collect data online following the rule of no in-person contact with the respondents.

Further, taking into consideration uncertain times for everyone and limitations to travel and get in contact with employees, respondents were chosen purposively from the Delhi and Delhi NCR Region (i.e., Faridabad, Ghaziabad, Gurugram, and Noida) where there is a high number of companies absorbing individuals with education in technological fields and are expert in delivering job responsibilities through teleworking. Moreover, the data collection tools circulated online as google form, on various appropriate social media platforms, among employees with telework expertise, and working from home during the second wave of the COVID-19 pandemic in India. So, for data collection, purposive sampling was used. A total of 92 respondents gave consent to participate in the study and completed the data collection tools.

As per the literature review, the researcher finds it appropriate to look for the perceived stress and the perceived social support of the employees working from home, particularly in crises.

There are many tools to gauge the perceived stress in different population. However, The Perceived Stress Scale (PSS) is one of the most used instruments to explore how much overburdened, unstable, and intense respondents perceive their situations or environment. Initially, this scale developed as a 14-item scale where respondents marked their feelings on the Likert scale as never, almost never, sometimes, fairly often and very often for a situation or event in the previous month. It is highly correlated to biomarkers of stress, such as cortisol^[14,15]. Later, its two shorter versions developed from the original 14 items perceived stress scale. It translated into many languages. For the present study English version of the PSS-10 item was used. It is available as a free source and used widely to measure stress among employees under different conditions^[16,17].

The Multidimensional Scale of Perceived Social Support used to measure social support. It is easy to administer 12 items to respond on a seven-point rating scale ranging from very strongly disagree to very strongly agree. It extensively used to capture the perceived social support from three particular life areas, i.e., significant others, Family and Friends of an individual. It also gives the overall score to explore the perception of social support by the individual in general. It is a validated and reliable tool available in the public domain for research use^[18].

From Delhi and Delhi NCR geographical area, employees working from home given above mentioned tools in the google form. Moreover, the researcher using one small interview guide to collect the socio-demographic details and other aspects of employee's occupational nature and a few of their family details, particularly during the ongoing COVID-19 pandemic like hours of remote work, sleep and exercise hours, information about the COVID-19 positive family/relative members and their COVID-19 status.

Quantitative univariate and bivariate analysis were done on the collected data using Statistical Package for Social Sciences (SPSS). Though there was a total of 92 respondents participated in the study. However, due to the geographical limitation (i.e., Delhi and Delhi NCR) and lesser response on contact during the second wave of the COVID-19 pandemic, the study cannot be generalized to the larger population. Still, the present study proposes an opportunity to understand the work from home scenario, its impact on employees and the role of social support, particularly during crisis's situations.

RESULTS

The data collection was between period of April 13 to May 12 2021. During this period, most states and cities went under lockdown, and the second wave of the pandemic slowly raises, and there was a sudden increase in COVID case ^[13]. The mean age of the respondents was 32.3 (SD:2.8) years. Out of the total sample of 92 employees working from home, 51 females (55%) and 41 (45%) were males. The majority of them, i.e., 64 (70%), were married, 26 were unmarried, out of these, 7 (8%) were in distance open relationship, and 7 (8%) in the distance committed relation. Whereas 14 (15%) were single. 1 (1.1%) divorced, and 1 (1.1%) was separated and in the distance committed relationship. The sample has mixed sexual orientation, with 76 (83%) were heterosexual, and 16 (17%) were queer. The majority of them were working in the KPO industry, i.e., 45 (49%), 31 (34%) employees were from IT services, and 16 (17%) were Electronic engineers.

The present research explored home working conditions during the crises of COVID-19. It found out that most of the employees reported having demanding work, and to complete the task; they also forced to work on holidays. The maximum of them worked for 5 to 8 hours a day, and a considerable number of employees reported even work for 11 hours a day. It also found out that few of the employees were delivering their work tasks while taking care of dependent family members in the house [Table 1]

As evident from Table 2, there was a significant difference between male and female employees' perceived stress while working from home. Further, there was a considerable difference in perception of stress across the different industries where the respondents were employed. Moreover, there was a significant difference in perceived stress between COVID-19 positive tested employees compared to their counterparts. Similar was the case with employees whose family members were tested positive for the COVID-19.

As far as the perception of social support is concerned, both male and females were experiencing the difference in overall social support, support from significant other and friends. The same was with employees working in different industries or field of work and the employees whose one of the family members was tested positive for the COVID-19. However, later found to have a significant difference in the perception of family support, additionally [Table 3]

As indicated in Table 4, age negatively correlated with perceived friends support during crises like the COVID-19 pandemic. Whereas, in the sample of employees working from home, hours of sleep was negatively correlated with perceived stress and positively correlated with all the dimensions of perceived social support. Further, perception of overall social support, support from significant others and friends support negatively correlated to perceived stress of the employees. During this

time of crises, perception family support was not having any significant relation with perceived stress.

DISCUSSION

From March 15 2021, there was an outpouring of COVID-19 cases. During the first week of April 2021, there was a vast wave where almost 400,000 COVID cases reported daily. Moreover, on May 6 2021, 414,000 cases recorded in a day. There was an assumption to get the peak of the second wave of the CVOID -19 pandemic by the third week of May 2021 began in India. In Subsequent weeks in India, all the health system, transportation, the socio-economic system crumbled. These were the crises situations where many employees worked from home. After all, the country needs to run its economy also. Because of this pandemic, there are already significant shifts in working conditions for most working industries worldwide ^[2]. Studies state that individuals mental and occupational well-being get disturbed under crises situations ^[19, 20].

As the evidence from the present study results, employees working from home overburdened due to high demands from work. They do not have time for leisure as working on holidays, with a maximum of 8 to 11 hours a day [Table 1].

As per the ILO report ^[21], COVID-19 has made employees work harder and have to make arrangements for their family, children, and dependent family members. Similarly found in the given sample where employees are providing care to dependent family members while working from home [Table 1].

ILO ^[21] also states that the disturbance in work-life balance and adverse effects on an individual's social life manifested due to the isolation and personal distancing forced on every humankind to prevent COVID-19 spread. Moreover, these situations are inviting much psychosocial risk to the workplaces. As from Table 2, it is essential to notice that employees having COVID-19 status positive for themselves or their family members are significantly different for their perceived stress scores. Similarly, we see there were reports of feeling depressed, anxious and having mood fluctuations due to these kinds of Psychosocial hazards at the workplace and finally, there can be an increase in the stress levels leading to burnout ^[21].

Table- 1: Frequency distribution of different work from home conditions	
Categories for work from home conditions	(n=92), n (%)
Total hours of remote working per day	
5 to 8 Hours/day	14 (15.2)
8-11 Hours/day	66 (71.7)
more than 11 hours	12 (13.0)
Working on holidays	
Yes	20 (21.7)
No	29 (31.5)
Sometimes	43(46.7)
Work demand during COVID-19 pandemic	
Nothing changed	15 (16.3)
Slightly demanding	31 (33.7)

Moderately demanding	28 (30.4)
Much more demanding	18 (19.6)
Providing care to the dependent family members	
No	51 (55.4)
Yes	37 (40.2)
Not Applicable	4 (4.3)

In the present study, there is a significant difference in perceived stress and social support across different categories of industries or the work of employees and gender of the employees [Table 2, 3], it may depend on the support group of employees get from their organization. Organizational support plays a significant role in the perception of stress. If an organization gives appropriate flexibility and appropriate assistance, that can help to mitigate the stress [22]. At times different groups react or perceive their environment differently. Like females have more family responsibilities and while managing those they have to fulfil the job responsibilities too. Male and female may respond differently to crises situations or the different hazards [21].

It is well-known that adjustment or coping to crises situations or any stressful conditions need various resources. If adequate social support is available, a stressful situation can be mitigated appropriately and buffer the effects of crises situations [23, 24].

Table 2: Relation between socio-demographics with perceived stress of the respondents

	Low stress	Moderate Stress	High Stress	Chi-Square test (p)
Gender categories				
Female (n=51), n (%)	2 (3.9%)	21 (41.2%)	28 (54.9%)	20.427
Male (n=41), n (%)	3 (7.3%)	34 (82.2%)	4 (9.8%)	(.000*)
Employment Industry categories				16.541
Electronic Engineers (n=16), n (%)	0 (0.0%)	8 (50.0%)	8 (50.0%)	(.002*)
IT Services (n=31), n (%)	1 (3.2%)	27 (87.1%)	3 (9.7%)	
KPO (n=45), n (%)	4 (8.9%)	20 (44.4%)	21 (46.7%)	
Positive COVID Status of the Respondents				
No (n=80), n (%)	5 (6.3%)	43 (53.8%)	32 (40.0%)	9.284
Yes (n=12), n (%)	0 (0.0%)	12 (100%)	0	(.010*)
COVID Status positive of the family member				
Yes (n=52), n (%)	5 (9.6)	32 (61.5)	15 (28.8)	9.284
No (n=40), n (%)	0 (0.0)	23 (57.5)	17 (42.5)	(.010*)

* $P < 0.05$; ** $P < 0.001$

Table 3: Relation between Socio-demographics and various dimensions of perceived social support of the respondents

			Low Support	Moderate Support	High Support	Chi-Square test (p)
		Social Support	10 (19.6%)	13 (25.5%)	28 (54.9%)	8.502 (.014*)
		Others	1 (2.4%)	19 (46.3%)	21 (51.2%)	
Gender categories	Female (n=51), n (%)	Support from Significant Others	11 (21.6%)	13 (25.5%)	27 (52.9%)	10.360 (.006**)
	Male (n=41), n (%)	Friends Support	10 (19.6) 2.4%	21 (41.2) 36.6%	20 (39.2) 61.0%	7.926 (.019*)
Employment Industry categories	Electronic Engineers (n=16), n (%)	Social Support	0 (0.0%)	10 (62.5%)	6 (37.5)	19.385 (.001*)
	IT Services (n=31), n (%)	Support from Significant Others	10 (22.2) 2 (6.5)	7 (15.6) 4 (12.9)	28 (62.2) 25 (80.6)	11.422 (.022*)
	KPO (n=45), n (%)	Friends Support	0 (0.0%)	13 (81.3)	3 (18.8)	20.993 (.000**)
		Support	1 (3.2) 10 (22.2)	11 (35.5) 12 (26.7)	19 (61.3) 23 (51.1)	
COVID Status positive of the family member	Yes (n=52), n (%)	Social Support	1 (1.9)	18 (34.6)	33 (63.5)	12.407 (.002**)
	No (n=40), n (%)	Support from Significant Others	1 (1.9)	18 (34.6)	33 (63.5)	13.448 (.001**)
		Family Support	2 (3.8)	12 (23.1)	38 (73.1)	11.382 (.003**)
		Friends Support	1 (1.9)	21 (40.4)	30 (57.7)	12.003 (.002*)

*P<0.05; **P<0.001

Similarly, it has depicted in Table 4 the negative correlation of various social support dimensions with the employees' stress. However, sometimes the buffer affects social support during the crises times may depend on other interrelated conditions (for example, COVID-19 pandemic virtual meetings with friends, social distancing) like in the present study, support from friends with growing age is decreasing. Sleep also act as crucial to deal with problems related to physical and mental health. Research has found that extra sleep can help individuals be healthy and have good mental

health [25]. In the present sample, sleep negatively correlates to stress and favourable to perceived social support.

Table 4: Pearson Correlation

	Perceived Stress	Perceived Social Support	Support from Significant Others	Family support	Friends support
Perceived Stress	-	-.329**	-.401**	-.152	-.601**
Hours of Sleep	-.406**	.313**	.317**	.232*	.355**
Age	.121	-.183	-.111	-.040	-.259*

n-92

Correlation is significant at the 0.05 level (2-tailed).*

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

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CONCLUSION

To conclude, this research shows that the second wave of the COVID-19 pandemic has led to many occupational and familial demands on the employees working from home. These demands are overwhelming with social distance and lockdown situations and employees' own or family members' COVID positive status. Moreover, in such crises, the workplaces are demanding and perceived stressful by the employees working from home. Social support perception buffers the stressful situation. However, the family not considered as a source of support by the employees in such situations. Various industries or field of work have a significant difference in perception of stress and social support. It gives us the indication to look for organizational-level interventions, guidance, orientation sessions to work under crises situations like this. Flexibility from the organization, appropriate resource availability and supervisor guidance may bring some relief for employees to save themselves from these psychosocial work hazards while working from home.

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