Zooming In: A Gender-Based Examination of Job Satisfaction and Productivity While Working From Home

Dr. Kanika K. Ahuja¹ & Dr. Priyanka Padhy²

¹Professor, Department of Psychology, Lady Shri Ram College for Women, University of Delhi, India Assistant Professor², Department of Psychology, Lady Shri Ram College for Women, University of Delhi, India

Abstract

Background: As organizations pivot to hybrid working in the post COVID world, IT industry is predicted to be the top industry for remote workers in 2023. Yet, research is scanty on what factors contribute to productivity and job satisfaction for employees working for home. In order to maximize the benefits of working remotely, ways must be found to ensure that employees, both men and especially women, remain productive and connected while not being overburdened, and herein lies the relevance of the present investigation. This study examines how job satisfaction and employee productivity is affected by three job characteristics of working from home: home workspace suitability, digital social support and monitoring mechanisms, among men and women employees in the IT sector in India.

Materials and Methods: Using an online survey, data was obtained from a sample comprising of 116 employees (Men= 60, Women= 56) from 48 different IT firms, Tools to measure monitoring mechanisms, home-work space suitability and job satisfaction were adapted from Yu and Wu, 2021. The scale measuring digital social support. comprising of informational support and emotional support was adapted from Liang et al. (2011). Finally, employee productivity was measured using the scale developed by Farooq and Sultana (2021).

Results: T tests reveal no significant differences in job satisfaction and productivity between men and women. Regression analysis revealed that the characteristics of WFH that contribute to employee productivity and job satisfaction are different for men and women. Suitability of home work space is a significant predictor of productivity and job satisfaction of both men and women. Digital social support contributes to job satisfaction, but not productivity of either men or women employees. Monitoring mechanisms contribute to productivity of women, but not men.

Conclusion: it may be concluded that suitability of the home work space is a core condition for achieving both job satisfaction and productivity. By investigating how different configurations of job and home characteristics affect WFH, the findings of the study offer new insights for the design of future hybrid office models.

Key Words: Work from Home, Hybrid work, Job Satisfaction, Employee Productivity, Home Workspace Suitability, Digital Social Support, Monitoring Mechanisms, Gender

______ Date of Submission: 02-08-2023 Date of Acceptance: 12-08-2023

I. Introduction

The Covid-19 pandemic precipitated a seismic shift in the working practices of millions of people worldwide. The pandemic rapidly transformed how, and even whether and where, people work. With the onset of the Covid-19 pandemic in March 2020, companies across the world abruptly shuttered their offices and instructed employees to work from home indefinitely as a result of the pandemic. About 72% of employees worldwide were required to switch overnight to working from home (Chavez-Dreyfuss, 2020), a scale never seen before. As the pandemic receded and restrictions began to be lifted, 2022 saw a return of workers to office but not without an indelible mark having been left on the workplace. McLellan (2023) writes that many workers found Working from Home (WFH) to be liberating, an option that allowed for maintaining good work life balance, while still maintaining productivity. He goes as far as saying that 'the option to work flexibly from home is now seen as a right, rather than something that's a -sometimes reluctant-gift from employers.' Ranjit Atwal, Senior Director Analyst at Gartner says, 'Hybrid is no longer just an employee perk but an employee expectation' (Gartner, 2023). Calling hybrid work a more 'human deal', one that includes flexibility, empathy-based management and intentional collaboration, Gartner's survey report 2023 projects that 'by the end of 2023, 39% of global knowledge workers will work hybrid.' In the United States of America, 51% of knowledge workers will be working in a hybrid mode and 20% will be fully remote. The report also forecasts that for remote-first and hybrid organizations, virtual workplaces will become the center of digital employee experience and embody the organization's culture.

In a similar vein, Haan (2023) at Forbes Advisor that these statistics not only shed light on the current state of remote work, but also give a peek into the future of work.

Work from home (WFH) is defined as the practice of performing work-related activities from the employees' homes rather than being physically present at an employer location, enabled by digital technology. An important difference between WFH pre COVID and post COVID is that the former was a work practice adopted by some organizations to maximize efficiency and reduce commuting time, while the latter was enforced by nearly all organizations due to pandemic necessitated measures like lockdowns and social distancing. As the latest trends indicate, several organizations have elected to make WFH a permanent feature of their business models or at least go in for a hybrid mode as life gets back to normalcy. Hybrid work has been operationally defined as working in office at least one day per week (Gartner, 2023).

WFH does offer various benefits to employees including flexibility, autonomy, comfort of working in one's own space (O'Hara, 2014), saving of daily commuting time and opening up better quality time with friends and family (Beck & Hensher, 2020). WFH can be beneficial for avoiding distractions from co-workers, especially in open offices. Workers may also have more control of environmental factors when WFH, such as indoor environmental quality factors such as lighting, temperature, humidity, air quality, noise, ergonomics, etc., that are important for physical and mental health. While there are many benefits, WFH also comes with its own set of challenges, such as increasing risks to data security and personal data privacy. WFH can blur work–family boundaries and exacerbate work–family conflict (Noonan & Glass, 2012). Persistent overuse of technology for communication is increasing levels of stress, and the social isolation while WFH may be detrimental to both emotional wellbeing and relationships with colleagues (Cooper & Kurland, 2002). A study from Indonesia (Irawanto, Khusnul, & Kenny, 2021) reported WFH to have a significant positive effect on job satisfaction, but negative effect on work stress and work-life balance. Decreased physical and mental well-being following the transition to WFH after the pandemic was also reported by Xiao, Becerik-Gerber, Lucas, & Roll (2020).

Dispersed, distributed and remote workforces have become the new normal. This new paradigm calls for a shift in how organizations redesign and optimize WFH arrangements. If as the trends indicate, hybrid and remote work is here to stay, it is essential to examine the impact of the same along gender lines. In order to maximize the benefits of working remotely, ways must be found to ensure that employees, both men and especially women, remain productive and connected while not being overburdened, and herein lies the relevance of the present investigation. This study is therefore, based on the imperative to understand if and how men and women show differential satisfaction and productivity while working from home.

II. Review of Literature

Existing research has identified various factors that increase effectiveness and employee job satisfaction of remote work, such as technical support, trust of the manager, and training (Baker, Avery, & Crawford, 2007), high quality software (Kuruzovich, Paczkowski, Golden, & Venkatesh, 2021), income, working hours, free time, appropriate physical activity (Kocot, Maciaszczyk, Kocot, Kwasek, & Depta, 2021), the frequency of remote work (Golden, 2007), and environmental conditions at work (Isabel & Parada, 2018). Length of employment (Sutarto, Wardaningsih, & Putri, 2022), and being married is also associated with productivity during WFH (Shaikh, Pawar, Kasat, & Deshpande 2021).

A study by Wang, Liu, Qian & Parker (2020) found social support to help in overcoming loneliness faced while WFH, although this relationship was stronger for workers with higher self-discipline. They also found that people with higher social support were less likely to procrastinate on their work, subsequently increasing job performance.

Patanjali and Bhatta (2022) explored the impact of organizational factors on productivity of employees in the IT Industry in India using a sample of 526 IT experts. Around two-thirds of IT staff reported higher productivity while at WFH, utilizing the time saved from traveling as well as meeting increasing expectations. The findings indicate that organizational characteristics such as autonomy and empowerment, employee independence, and a supportive atmosphere are required to ensure employee productivity. Another study by Martin, Hauret and Fuhrer (2022) examined how the usage of collaborative digital tools such as group flow, instant messaging, web conferencing etc. impacted job productivity, stress and job satisfaction. They found a somewhat complex and fragile relationship. Workers who used such tools daily often had an increase in productivity but a decrease in job satisfaction. Moreover, too much usage of such tools led to information overload, resulting in decrease of both productivity and job satisfaction.

Yu and Wu (2021) captured the WFH experiences of 256 workers from 66 Chinese enterprises during the pandemic. They examined how satisfaction was affected by five job characteristics when WFH: longevity (time), home workspace suitability (space), job autonomy (criticality), digital social support (novelty) and monitoring mechanisms (disruption). Their findings revealed a suitable home workspace to be a core condition that promoted employee job satisfaction. In the absence of a suitable workspace, digital social support and an appropriate monitoring mechanism, long-term WFH was found to undermine job satisfaction. Home work space

suitability encompasses physical elements of the workplace (e.g., dedicated workplace) as well as mental conditions (e.g., freedom from distraction and noise). Carillo et al. (2020) found the need for appropriate telework conditions so that employees could effectively work from home, as a crucial factor influencing employee adjustment. They asserted that a separate home workspace ensures clear structural boundaries between work and home and maintains job satisfaction by controlling distractions, such as children and noise. Similarly, Galanti et al. (2021) investigated the impact of family-work conflict, social isolation, distracting environment, job autonomy and self- leadership on employee productivity, work engagement and stress experiences of workers while WFH. Their results showed a negative relationship between family work conflict and social isolation with WFH productivity, engagement and stress. Self- leadership and autonomy were positively related with WFH productivity and engagement, but not stress. Shareena and Mahammad (2020) similarly found that that willingness to WFH is entirely dependent on presence of children at home, comfortable space at home, quiet environment at home and good internet connectivity.

Employees working from home often have to rely on online platforms for digital social support (DSS) both in and outside of work. According to social support theory, DSS during work provides the necessary emotional and instrumental resources to mitigate work–family conflicts, therefore promoting job satisfaction (Kossek et al., 2011). Similarly, DSS outside of work has been shown to improve job satisfaction by compensating employees for the lack of interpersonal interaction during working hours and by providing a release from work pressure (Anderson, Kaplan, & Vega, 2015). Research has also highlighted the role of monitoring and evaluating employees as an integral component of WFH arrangements. With WFH becoming mainstream, organizations have had to devise novel ways of supervising and monitoring their employees. In a study by Wang, Schlagwein, Cecez-Kecmanovic, & Cahalane (2020), participants reported that they experienced different forms of monitoring from their supervisors, including daily reports, clocking in/out via applications such as DingTalk, and the requirement to have a camera on while working. Most comments about monitoring were positive, with some participants reporting that monitoring helped them cope with procrastination and to concentrate on their core tasks. Golden (2007) found that teleworkers with high quality monitoring mechanisms and undergoing long-term home-based work reported the highest degree of job satisfaction.

Research has also focused on gender differences in preferences and outcomes of WFH. Adverse implications for women when WFH have been highlighted, owing to recurring findings that women are more likely to carry out more domestic responsibilities while working flexibly, whereas men are more likely to prioritize and expand their work spheres. Feng and Savani (2020), for instance, found that the COVID-19 crisis created more gender gaps in self-reported productivity and job satisfaction. Stefanova, Farrell and Latu (2021) showed that female caregivers spent significantly less time on work compared to the other groups and significantly more time on caregiving compared to male caregivers during the lockdown. There was a significant direct effect of caregiving on career outcomes for women, such that the more caregiving women performed during the lockdown relative to other tasks, the more negative their self-reported career outcomes were. Among men, caregiving did not predict career outcomes. Gender differences in scholarly productivity for academics has received a great deal of attention as well, with findings showing greater decrease in productivity for women and parents during the pandemic (for e.g., Breuning, Fattore, Ramos, & Scalera, 2020). However, Awada et al. (2021) and Galanti et al. (2021) have shown contradictory findings that productivity of women was relatively similar to men.

Gibbs, Mengel and Siemroth (2021) assessed the levels of productivity before and during WFH period of the pandemic in a large Asian IT services company, using a large sample size of 10,000 employees, and reported that productivity fell by 8-19%. Major determinants of change in productivity included children staying home, higher communication and coordination costs with uninterrupted working hours shrinking heavily, and fewer one-on-one meetings with supervisors. Women in particular showed a larger decline in WFH productivity not due to presence of children at home but more demands placed on women in the domestic setting while WFH.

Rožman, Sternad, Bobek, & Tominc (2021) studied gender differences in work satisfaction, work engagement and work efficiency among Slovenian employees WFH, and found that women employees, on average, were less satisfied than men employees. While women employees were satisfied with leadership and all the flexible work forms that the company allowed, their lowest average satisfaction was regarding the balance between work and private life. Men employees, ironically were most satisfied with the balance between work and private life, but least satisfied with the possibilities of training during the COVID-19 pandemic. Women employees also expressed higher reduction in work efficiency than men employees.

The review above has shown that WFH has impacted employee productivity and other organization related behaviours both positively and negatively. While lack of communication, social isolation and fatigue leads to a decrease in productivity, time saved due to travel and meetings increased employee productivity. More importantly, gender has been found to be an important factor influencing WFH especially because of its interplay with other variables such as marital status, number of family members, relationship with the partner, number of children, etc. Other factors that impact productivity and satisfaction of employees are availability of resources for WFH, organizational support and leadership.

This leads us to some important research questions. Is WFH more challenging for women? Do men and women employees respond to WFH similarly? Other crucial questions that merit consideration are: what aspects of WFH impact productivity and satisfaction of employees? How should organizations leverage different job characteristics of WFH to improve employee job satisfaction and productivity? Are factors at home also equally important? The present study attempts to answer these questions empirically. The aim of this study is to assess factors that contribute to job satisfaction and productivity under WFH situation among men and women employees. Placed in the context of the receding COVID-19 pandemic and the establishment of hybrid working as a normative work practice, the present study specifically examines how job satisfaction and employee productivity is affected by three job characteristics: home workspace suitability (HWSS), digital social support (DSS) and monitoring mechanisms (MM), among men and women employees in the IT sector in India. The following hypotheses were framed for the study:

H1: There will be a significant difference in productivity of men and women employees working from home.

H2: There will be a significant difference in job satisfaction of men and women employees working from home.

H3A: There will be a significant prediction of job satisfaction by DSS, HWSS, and MM among men employees.

H3B: There will be a significant prediction of job satisfaction by DSS, HWSS, and MM among women employees.

H3C: There will be a significant prediction of job satisfaction by DSS, HWSS, and MM among employees.

H4A: There will be a significant prediction of employee productivity by DSS, HWSS, and MM among men employees.

H4B: There will be a significant prediction of employee productivity by DSS, HWSS, and MM among women employees.

H4C: There will be a significant prediction of employee productivity by DSS, HWSS, and MM among employees.

III. Material and Methods

The present study uses a cross-sectional design, with purposive snowball sampling, using an online survey to examine WFH experiences of both men and women employees working in IT companies. Such companies were so chosen because when the COVID-19 outbreak induced WFH in 2020, it was predicted to stay for a very long time, especially in the Indian IT industry; a prediction which has been borne out by Forbes Advisor (Haan, 2023), who stated that IT is the top industry for remote workers in 2023. The present study treats job satisfaction and employee productivity as dependent variables that are influenced by three independent variables, viz. home workspace suitability (HWSS), digital social support (DSS) and monitoring mechanisms (MM).

Sample

The sample comprised of 116 employees (Men= 60, Women= 56) of 48 different IT firms, such as TCS, Infosys, Wipro, HCL, Accenture, Adobe, and IBM. Only employees meeting the inclusion criteria of being IT workers, aged between 18-60 years, based in India working from home were included in the survey. Purposive snowball sampling was used to recruit participants. The socio-demographic characteristics of the participants are presented in Table 1.

 Table 1

 Socio-Demographic Characteristics of Participants

Characteristic	n (116)	%
Gender		
Female	56	48.28
Male	60	51.72
Age (in years)		
18 to 30	83	71.55
30 to 45	20	17.24
45 to 60	13	11.21
Tenure in Organisation		
Less than a year	36	31.03
1 to 5 years	54	46.55
5 to 10 years	14	12.07
More than 10 years	12	10.35
Level in Organisation		

Zooming In: A Gender-Based Examination of Job Satisfaction And Productivity While ..

Executive or senior management	10	8.62
Middle management	56	48.28
Junior management	50	43.10
Functional Specialization		
System Analysis	9	7.76
Marketing/Sales	10	8.62
Programming/Engineering	74	63.79
Accounting	3	2.59
Other	20	17.24
Number of work hours per week during work from home		
Less than 40	13	11.21
40-45	52	44.83
46-50	31	26.72
More than 50	20	17.24
Marital Status		
Single	78	67.24
Married/Living with partner	37	31.90
Other	1	0.86
Family Structure		
Nuclear Family	86	74.14
Joint Family	28	24.14
Extended	2	1.72
Family Size		
Less than 3	7	6.03
3 to 5	85	73.28
More than 5	24	20.69
Availability of House help		
Yes	90	77.59
No	26	22.41

Tools

The survey form designed for the study consisted of three sections. *Section 1* included the consent form outlining the purpose of the survey and the rights of the participants. Informed consent in writing was mandatorily required in order to proceed.

Section 2 inquired if the participant has worked from home for at least 60 days during the last one year at the time of the survey. Section 3 consisted of demographic details such as age, gender, educational level, marital status, tenure, level in organization, etc. Section 4 included the survey with five tools, Parts - A, B, C, D & E - consisting of a total of 30 items.

Part A: Monitoring Mechanisms (MM)

A nine-item scale by Yu and Wu (2021) was used to measure MM on three dimensions: output, behaviour, and clan control. Output control emphasizes target-related performance and was measured through items 1-3. A sample item is 'My Supervisor used pre-established targets as benchmarks for employees' performance evaluations'. Behavioural control focuses on task scheduling, with frequent monitoring of employee compliance with regulations, which was measured through items 4–6. A sample item included 'Our company requires employees to work the standard hours for their work group'. Finally, clan control seeks to promote appropriate behaviours by committing employees and managers to shared beliefs and was assessed by items 7–9, such as 'I was encouraged to adapt those behaviours that fit our company's values and norms'. Since the original scale was developed for use with HR managers, some items of this scale were modified for self-report by employees to suit the needs of the present study. For instance, 'Supervisors contacted employees frequently every day' was changed to 'My supervisor contacted me frequently every day'.

These nine items were rated on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The instrument has a Cronbach's Alpha of 0.90. Authors have also reported satisfactory convergent validity as the average variance extracted was found to be 0.52. Acceptable discriminant validity was also reported.

Part B: Home-Workspace Suitability (HWSS)

HWSS was measured using a five-item scale by Yu and Wu (2021). Sample items include the following: 'My home workspace is suitable for my work'; 'I am bothered by noise while working at home'. The participants were asked to respond on a 5-point Likert scale ranging from Strongly Disagree to Strongly Agree. Cronbach's alpha was calculated to be 0.83 and the composite reliability was 0.84. The authors have also reported a satisfactory convergent validity as the average variance extracted was 0.51. The authors have further reported acceptable discriminant validity.

Part C: Digital Social Support (DSS)

DSS refers to assistance or emotional support provided by communication with others through online platforms. In the current study the tool used to measure DSS during WFH, was adapted from Liang et al. (2011). The 6-item scale incorporates two dimensions: informational support and emotional support. Informational support refers to providing messages, in the form of recommendations, advice, or knowledge, that could be helpful for solving problems. A sample item is 'When I encountered a problem, some people in my company would give me information online/digitally to help me overcome the problem'. Emotional support, on the other hand, refers to providing messages that involve emotional concerns such as caring, understanding, or empathy. For instance, 'When I encountered difficulties, some people in the company would comfort and encourage me online/digitally'. This six-item scale is rated on a 5-point Likert scale, ranging from 1= Strongly Agree to 5=Strongly Disagree. The Cronbach's alpha and composite reliability for this modified DSS version was calculated to be 0.92. The authors have also reported a satisfactory convergent validity as the average variance extracted was 0.66. Acceptable discriminant validity was also reported.

Part D: Employee Productivity (EP)

Five items measuring EP were taken from Farooq & Sultana (2021). A sample item included, 'I have a high work performance in the current situation'. The responses were recorded on a five-point Likert scale ranging from "totally disagree" (1) to "totally agree" (5). Cronbach's alpha values of 0.70 was reported by the authors. The convergent validity of employee profitability, assessed using the average variance extracted, was found to be 0.522.

Part E: Job Satisfaction

A four-item scale by Yu and Wu (2021) was used to measure employees' job satisfaction in the context of WFH. The current scale focused on employees' overall emotional response to working from home rather than specific work issues (such as salary, promotion or colleagues). This short form was found to be reliable and has been used in previous research as well. Sample items included, 'I feel fairly satisfied with my present job working from home'. The participants were asked to rate their satisfaction on a 5-point Likert scale ranging from Strongly Agree to Strongly Disagree. The instrument has a Cronbach's Alpha of 0.88 and composite reliability of 0.88. Authors have also reported satisfactory convergent validity as the average variance extracted (AVE) was found to be 0.64. Acceptable Discriminant validity was also reported.

Procedure

All procedures outlining the principles of research were in accordance with the formal ethical standards of Lady Shri Ram College for Women. The research protocol for the study was approved by The Psychology Research Review Committee from Lady Shri Ram College for Women.

The data was obtained through an online survey via the Google Forms platform. The participants included professionals working within IT firms who were selected through convenience sampling. An introductory message along with a survey link was sent to the participants, via an email. They were informed that the study taps their WFH experiences, although the exact variables were not revealed at the outset. They were assured that confidentiality of their responses would be maintained and that their individual responses will only be documented for research purposes. After the collection of data, the participants were sent a message thanking them for their participation and cooperation. The data was analyzed using SPSS IBM 20.0.

Statistical Analysis

Three levels of analysis were carried out - descriptive, correlational and inferential. Descriptive analysis was used to describe the basic features of the data in a study using mean, standard deviation, range, skewness and kurtosis. Inferential analysis was used to assess gender differences on job satisfaction and employee productivity. Correlational analysis was used to assess the relationship between job satisfaction, employee productivity and characteristics of work from home (MM, DSS, HWSS) among the sample. Further, regression analyses were also undertaken to determine the predictors of job satisfaction and employee performance from amongst the various characteristics of work from home (MM, DSS, HWSS). This was undertaken separately for males, females and the total sample. The level P < 0.05 was considered as the cutoff value or significance.

18 | Page

IV. Results and Discussion

The results are presented in the following tables (Tables 2-6).

 Table 2

 Descriptive Statistics for Overall Sample

Descriptive statistics for Overall sample									
Factors	Min	Max	Range	M	SD	Skewness SE=.225	Kurtosis SE=.446		
Monitoring Mechanisms	23.00	42.00	19.00	34.0345	4.12823	-0.476	-0.212		
Digital Social Support	11.00	30.00	19.00	24.8707	3.79595	-0.858	0.804		
Home Workspace Suitability	7.00	25.00	18.00	18.5862	3.33902	-0.619	0.672		
Job Satisfaction	8.00	20.00	12.00	14.9655	2.51580	-0.430	0.198		
Employee Productivity	11.00	25.00	14.00	19.5259	3.38144	-0.193	-0.390		

Table 2 represents the statistics (minimum and maximum scores of the participants, range, mean, standard deviation, skewness and kurtosis values) for the overall sample (116 participants) on 5 factors: MM, DSS, HWSS, Job Satisfaction, and Employee Productivity. The skewness and kurtosis value for these factors fall within the acceptable range, i.e., between -2 to +2 for skewness and -7 to +7 for kurtosis (George & Mallery, 2010; Hair et al., 2010), implying that the data for the study is normally distributed.

 Table 3

 Independent Samples t-test for Employee productivity and Job satisfaction for men and women employees

	Employee Productivity					Job Satisfaction						
N	M	SD	t	p		M	SD	t	p			
Men			60	19.95	3.31	1.40	.163		15.15	3.79	.816	.416
Wome	en	65	19.07	3.81				14.77	3.69			

An independent two-tailed t-test comparing the productivity scores of men and women employees during WFH revealed no significant differences [t(116) = 1.404, p value = .163)](Refer Table 3). Hence, Hypothesis 1 that 'There will be a significant difference in productivity of men and women employees working from home' is rejected. Certain demographic characteristics of the present sample may explain these findings. Avast majority of the sample (77.59%) reported that household help was available to them - this could have reduced the burden of childcare and household chores that had been found to adversely impact the productivity of women in earlier studies. In the past, research has shown how employees with children living at home suffered a bigger decline in productivity than those without children (Gibbs et al., 2021). However, a majority of the present sample was unmarried (67.24%) and living in a nuclear family setup with 3-5 family members (73.28%). This could have contributed to fewer household responsibilities and interruptions for both genders in this sample as compared to employees who are married, have children, or live in larger families - reducing the disparity in productivity. As asserted by Khare (2022), working women of nuclear families have greater power of decision making regarding different aspects of personal activities in comparison to their counterparts living in joint families. This could have led to the married women making better adjustments in work time adaptations and perhaps also sharing the burden of household work with their spouses.

Further, the fallout from the pandemic and soaring economic uncertainties have caused companies to trim their workforce. The tech industry seems to be particularly affected. In 2022, over 150,000 tech workers were laid off in comparison to 80,000 in 2020 and 15,000 in 2021 (2023 Layoffs: A timeline of job-cuts in top companies, 2023). A technological company called Xsolla asked 150 employees to leave on the basis of an AI-based "productivity audit" of its workers (Fortson, 2021). This shows how productivity is a key consideration for organizations at large, and this emphasis is explicit or applicable to all employees, regardless of their gender. An environment where all employees have to be equally productive in order to protect their jobs could have contributed to the present findings of no significant gender differences in employee productivity. Research has also documented that productivity during WFH is dependent on organizational factors such as autonomy in one's

job and a supportive environment (Patanjali & Bhatta, 2022) as opposed to gender. This may account for the similar productivity levels of men and women in the present study.

Further, the present study also found no significant difference between job satisfaction of male and female employees working from home [t(116) = .816, p value = .416]. Thus, the second hypothesis that 'There will be a significant difference in job satisfaction of men and women employees working from home' is also rejected. This may also be attributed to similar reasons, such as the demographic profile of the sample, the facilitative nature of WFH and the changed family-dynamics after the pandemic leading to equal division of home and child care work between men and women. As noted above, majority of the participants were unmarried (67.24%), did not have children, and had availability of sustained household help (77.59%). This ensured that the women were not disproportionately burdened with household responsibilities paving way for them to engage fully with their work. According to the role balance theory, an individual who is able to successfully balance the demands of multiple roles that they are likely to play in the form of an employee, spouse, parent etc., that exert conflicting demands of time and energy on them are likely to experience greater job satisfaction (Sirgy & Lee, 2016). Research has pointed that since the shift of work to home due to the pandemic, men are more likely to exhibit greater participation in household activities thus reducing the house and child care responsibilities on women ((Ahuja & Khurana, 2021; Derndorfer et.al., 2021), perhaps contributing to the finding of men and women being similar on job satisfaction.

Table 4Correlation Indices among Overall Sample

Factor	Monitoring Mechanisms	Digital Social Support	Home Workspace Suitability	Job Satisfaction	Employee Productivity
Monitoring Mechanisms	1.000	.142	.105	.091	.278**
Digital Social Support		1.000	.314**	.528**	.301**
Home Workspace Suitability			1.000	.500**	.486**
Job Satisfaction				1.000	.479**
Employee Productivity					1.000

Note. N = 116

Table 4 presents the relationship between job satisfaction, EP and characteristics of work from home (MM, DSS, HWSS) among the overall sample. DSS and HWSS show moderate to high correlation respectively with job satisfaction, while MM shows low correlation with job satisfaction (r = .091). All three are significantly correlated with EP.

Table 5:Model Summary and coefficients of HWSS, DSS, and MM on Job Satisfaction of men employees (Model 1), women employees (Model 2) and total sample (Model 3)

Model F Chang	R ge	\mathbb{R}^2	$R^2_{(adj)}$	Std Error	R ² Change	F Change	df1	df2	Sig
1	.472a	.223	.209	2.14	.223	16.61	1	- 58	.000
	.540 b	.291	.266	2.06	.069	5.53	1	57	.022
a. Predi	ctors: (C	onstant)	, DSS						
b. Predi	ctors: (C	onstant)	, DSS, H	WSS					
						· · · · · · · · · · · · · · · · · · ·		_	
2	.598 a	.358	.346	2.13	.358	30.09	1	54	.000
	.717 ^b	.514	.496	1.87	.156	17.07	1	53	.000
a. Predi	ctors: (C	onstant).	, DSS						
b. Predi	ctors: (C	onstant)	, DSS, H	WSS					
								_	
3.	.528 a	.278	.272	2.15	.278	43.99	1	114	.000
	.635 b	.403	.392	1.96	.124	23.50	1	113	.000
a. Predi	ctors: (C	onstant)	, DSS						
b. Predi	ctors: (C	Constant)	, DSS, H	WSS					

^{*}Correlation is significant at the .05 level (one-tailed).

^{**}Correlation is significant at the .01 level (one-tailed).

c. Dependent Variable: Job Satisfaction

Table 5 shows that both DSS and HWSS were found to be significant predictors for job satisfaction in males, females and the overall sample. However, on one hand DSS contributed 20.9%, HWSS contributed 5.53% of the variance in job satisfaction among males; on the other, DSS contributed 34.6% and HWSS contributes 17.07% of the variance in job satisfaction among women employees. MM was not found to be a significant predictor for job satisfaction in either men or women employees. All hypotheses 3A, 3B and 3C are therefore partially accepted.

Table 6:Model Summary and coefficients of HWSS, DSS, and MM on Employee Productivity (EP) of men employees (Model 1), women employees (Model 2) and total sample (Model 3)

Model Change	R	\mathbb{R}^2	$R^2_{(adj)}$	Std Error	R ² Change	FChange	df1	df2	Sig F
1	.366ª	.134	.119	3.10	.134	8.959	1	58	.004
a. Predi	ctors: (C	onstant)	, HWSS						
2	.577 a	.325	.313	2.844	.325	26.06	1	54	.000
	.683 b	.467	.447	2.55	.141	14.07	1	53	.000
a. Predi	ctors: (C	onstant)	, HWSS						
b. Predi	ctors: (C	onstant)	, HWSS,	MM					
3.	.486 a	.236	.230	2.97	.236	35.28	1	114	.000
	.557 b	.289	.276	2.88	.052	8.30	1	113	.005
a. Predi	ctors: (C	onstant)	. HWSS						
	,	,	, HWSS,	MM					

c. Dependent Variable: EP

With regards to the predictors of EP, Table 6 shows only HWSS to contribute around 11.9% of the variance on productivity among males. Both MM and DSS were not found to be significant predictors of productivity in males. For women employees, both HWSS and MM contributed to productivity, with the former accounting for 31.3% and the latter 14.1%. DSS did not emerge as a predictor of employee productivity for men, women or overall sample. All hypotheses 4A, 4B and 4C are therefore only partially accepted.

From the results reported, it is evident that Home Work Space Suitability (HWSS) emerged as the most crucial WFH characteristic in contributing to both job satisfaction and employee productivity of men and women employees, but more so for the latter. These results are in line with existing literature, which has highlighted the role of suitability of the home work space in affecting the outcome of remote work (Nakrošienė et al., 2019; Yu & Wu, 2021). Research shows that employees who work at home want a quality work environment at home similar to a conventional office, such as having space, adequate lighting, equipment, and Wi-Fi connectivity (Ng, 2010). Research has also emphasized how the privacy of the work area and psychological detachment from the household can help employees focus on work (Tejero, Seva, & Fadrilan-Camacho, 2021). This could be a more important concern for women given the typical household work distribution in Indian households, leading to the present finding.

The finding that DSS is an important contributor to both men and women employees for job satisfaction, but more so for the latter is also not surprising. Researchers (such as Duncan & Peterson, 2010) after all have found women to score higher than men in affiliation—intimacy motivation. In the context of the pandemic, digital communication and collaboration replaced almost all in-person work settings. While informational support could provide solutions, plans, or interpretation, emotional support focused on expressing one's concerns and hence helped to solve problems indirectly. Prolonged WFH may lead to more personal, intense work relationships as it allows people to distance themselves from negative or non-essential work relationships whilst developing positive ones (Golden, 2007; Tietze & Nadin, 2011). Social support as an important job resource is probably easy to access only for those with sufficient digital communication, such as IT employees in the present study. According to Göktas and Özdinç (2022), low perceived social support increases an individual's anxiety level and decreases job satisfaction. The findings of this study demonstrate that managers and those responsible for employee well-being in the workplace should focus on social support at work.

Finally, MM did not contribute to job satisfaction of either men or women employees, but did impact productivity of women employees. EPM (Electronic Performance Monitoring) has become a widespread practice in work environments. Managers frequently have access to their employees' performance data, as well as other

data on behaviour which allows them to check the working pace, the degree of work accuracy, log-in and log-off times, and even the number and duration of breaks (for e.g., Aiello and Kolb, 1995). According to Wang et al. (2020), appropriate monitoring can alleviate employee procrastination, which could have led to productivity. As there is a continuous conflict between fulfilling domestic and work responsibilities for women working from home, it may be inferred that monitoring by the organization helps women to perform better as they are likely to take deliberate effort to commit to work. They are more likely to dispense their work responsibilities well rather than being swayed into home chores as they are answerable to someone at work.

V. Conclusion

From the findings of this study, it can be concluded that contrary to popular perception, both men and women are equally satisfied with WFH. The characteristics of WFH that contribute to employee productivity and job satisfaction are however, different for men and women. Suitability of home work space is crucial for enhancing productivity and job satisfaction of both men and women, albeit more crucial to women. Digital social support contributes to job satisfaction, but not productivity of either men or women employees. Monitoring mechanisms, on the other hand, impact productivity of women, but not men.

Working from home may be more challenging for women, since they tend to be more responsible for household chores and other home activities. However, as our results indicate, women are equally productive as their male counterparts.

Certain limitations of the present study are noteworthy. We have used self-report measures which can be subject to biases and errors. Future research could make use of other measures collected from managers or the organization, especially for employee productivity. Since two-thirds of the present sample was unmarried, this may not be a true representation of employees working across various organizations, which may impact the generalizability of our results.

VI. Implications

Haan (2023) at Forbes Advisor reports that 98% of workers want to work remotely, at least some of the time. 57% of workers would look for other jobs if remote working was not allowed and 71% of remote workers said that this template of work allows for being work-life balance. In this scenario, hybrid working models where workers would WFH a significant part of the time, are well entrenched into the future. By investigating how different configurations of job and home characteristics affect WFH, the findings of the study are a valuable addition to the WFH literature and offer new insights for the design of future hybrid office models. This research is one of the few studying WFH in an Indian population and can be used in future to improve work from home policies in order to ensure both greater satisfaction as well as productivity among male and female employees.

When implementing long-term WFH or a hybrid mode, companies should ensure that HWSS and DSS function together optimally, and de-emphasize MM. As HWSS is a core condition for achieving both satisfaction and productivity, organizations should ensure that their employees maintain an undisturbed work environment by keeping family members informed about their work schedule, avoid family distractions, and create an independent workspace. Companies, in turn, must offer essential office equipment and ergonomically designed furniture for ease of working from home. In a situation where WFH, complete or partial, seems to be an inevitable part of the future, it is important that such researches continue to take place in order to benefit both employees and employers.

REFERENCES

- [1]. Ahuja KK, & Khurana D. (2021). Locked-Down love: A study of intimate relationships before and after the COVID lockdown. Family Relations, 70(5):1343–57.
- [2]. Aiello, J. R., & Kolb, K. J. (1995). Electronic performance monitoring and social context: Impact on productivity and stress. Journal of Applied Psychology, 80(3), 339–353. https://doi.org/10.1037/0021-9010.80.3.339
- [3]. Anderson, A.J., Kaplan, S.A., & Vega, R.P. (2015). The impact of telework on emotional experience: When, and for whom, does telework improve daily affective well-being? European Journal of Work & Organizational Psychology, 24(6), 882-897. https://doi.org/10.1080/1359432X.2014.966086
- [4]. Awada, M., Lucas, G., Becerik-Gerber, B., Roll, S. (2021). Working from home during the COVID-19 pandemic: Impact on office worker productivity and work experience. Work, 69(4), 171-1189. doi: 10.3233/WOR-210301.
- [5]. Baker, E., Every, G.C., & Crawford, J. (2007). Satisfaction and perceived productivity when professionals work from home. Research and Practice in Human Resource Management, 15(1), 37-62. http://hdl.handle.net/10453/6434
- [6]. Beck M., & Hensher D.A. (2020). Insights into the impact of Covid-19 on household travel, work, activities and shopping in Australia the early days under restrictions. Transport Policy, 96, 76–93. doi: 10.1016/j.tranpol.2020.07.001.
- [7]. Breuning, M., Fattore, C., Ramos, J., & Scalera, J. (2020). The great equalizer? Gender, parenting, and scholarly productivity during the global pandemic. Political Science & Politics, 54(3), 1-5. DOI: 10.1017/S1049096520002036
- [8]. Carillo, K., Cachat-Rosset, G., Marsan, J., Saba, T., Klarsfeld, A. (2021) Adjusting to epidemic-induced telework: Empirical insights from teleworkers in France. European Journal of Information Systems, 30(1), 69-88. DOI: 10.1080/0960085X.2020.1829512
- [9]. Chavez-Dreyfuss, G. (2020). Permanently remote workers seen doubling in 2021 due to pandemic Productivity-Survey. Available online: https://www.reuters.com/article/uk-health-coronavirus-technology-idUKKBN2772P8 (accessed on 3 August 2022).
- [10]. Cooper, C.D. & Kurkland, N.B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. Journal of Organizational Behaviour, 23(4), 511-532. DOI: 10.1002/job.145

- [11]. Derndorfer J, Disslbacher F, Lechinger V, Mader K, Six E. (2021). Home, sweet home? The impact of working from home on the division of unpaid work during the COVID-19 lockdown. PLoS One, 16(11): e0259580. doi: 10.1371/journal.pone.0259580.
- [12]. Duncan, L. E., & Peterson, B. E. (2010). Gender and motivation for achievement, affiliation-intimacy, and power. In J. C. Chrisler & D. R. McCreary (Eds.), Handbook of gender research in psychology, Vol. 2. Gender research in social and applied psychology (pp. 41–62). Springer.
- [13]. Farooq, R, & Sultana, A. (2021). The potential impact of the COVID-19 pandemic on work from home and employee productivity. Measuring Business Excellence. 10.1108/MBE-12-2020-0173.
- [14]. Feng, Z., & Savani, K. (2020). Covid-19 created a gender gap in perceived work productivity and job satisfaction: Implications for dual-career parents working from home. Gender in Management. DOI: 10.1108/GM-07-2020-0202
- [15]. Fortson, D. (2021, December 18). Fired by Al: The algorithm that judges whether staff are really working from home. The Times. Retrieved from https://www.thetimes.co.uk/article/computer-says-clear-your-desk-artificial-intelligence-wfh-covid-hc7wvs3s3
- [16]. Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak: The impact on employees' remote work productivity, engagement, and stress. Journal of Occupational and Environmental Medicine, 63(7): e426-e432. doi: 10.1097/JOM.0000000000002236.
- [17]. Gartner Forecasts 39% of Global Knowledge Workers Will Work Hybrid by the End of 2023. (2023, March 1). Retrieved August 2, 2023, from Gartner website: https://www.gartner.com/en/newsroom/press-releases/2023-03-01-gartner-forecasts-39-percent-of-global-knowledge-workers-will-work-hybrid-by-the-end-of-2023
- [18]. Gibbs, M., Mengel, E., & Siemroth, C. (2021). Work from Home & Productivity: Evidence from Personnel & Analytics Data on IT Professionals. SSRN Electronic Journal. DOI: 10.2139/ssrn.3841567
- [19]. Göktaş A, & Özdinç S. (2022). Investigation of the effect of social support perceived by workplace employees on anxiety and job satisfaction during COVID-19. Work, 72(1), 49-58. doi: 10.3233/WOR-211229.
- [20]. Golden, T. (2007). Co-workers who telework and the impact on those in the office: Understanding the implications of virtual work for co-worker satisfaction and turnover intentions. Human Relations, 60(11), 1641-1667. https://doi.org/10.1177/0018726707084303
- [21]. Haan, K. (2023, June 12). Remote Work Statistics and Trends in 2023. Forbes Advisor. Retrieved from https://datawrapper.dwcdn.net/G2a6n/1/
- [22]. Irawanto, D.W., Novianti, K.R., & Roz, K. (2021). Work from home: Measuring satisfaction between work–life balance and work stress during the COVID-19 Pandemic in Indonesia. Economies, 9(3): 96. DOI: 10.3390/economies9030096
- [23]. Isabel, A., & Parada, O. (2018). Factors that influence job satisfaction of teleworkers: Evidence from Mexico. Global Journal of Business Research, 12(1), 41-49.
- [24]. Khare, S. (2022). A comparative study of working women's decision making related to their personal activities in joint and nuclear family. International Journal of Creative Research Thoughts, 11(3), 500-506. Available at https://ijcrt.org/papers/IJCRT2203290.pdf
- [25]. Kocot, M., Maciaszczyk, M., Kwasek, A., & Depta, A. (2021). Assessment and effectiveness of E-learning and students' satisfaction with online classes: The example of Polish universities. European Research Studies Journal, 24(3B), 186-199. DOI: 10.35808/ersj/2457
- [26]. Kossek, E., Pichler, S., Bodner, T., & Hammer, L. (2011). Workplace social support and work-family conflict: A meta-analysis clarifying the influence of general and work-family specific supervisor and organizational support. Personnel Psychology, 64(2), 289-313. doi: 10.1111/j.1744-6570.2011.01211.x
- [27]. Kuruzovich, J., Paczkowski, W.P., Golden, T.D., & Venkatesh, V. (2021). Telecommuting and job outcomes: A moderated mediation model of system use, software quality, and social exchange. Information & Management, 58(3): 103431. DOI: 10.1016/j.im.2021.103431[29.] McLellan, C. (2023, May 8). Hybrid and remote work: The state of play in 2023. Retrieved from: https://www.zdnet.com/home-and-office/work-life/hybrid-and-remote-work-the-state-of-play-in-2023/
- [28]. Liang, T.P, Ho, Y.T., Li, Y.W.,& Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. International Journal of Electronic Commerce, 16(2), 69-90, DOI: 10.2753/JEC1086-4415160204
- [29]. Martin, L., Hauret, L., & Fuhrer, C. (2022). Digitally transformed home office impacts on job satisfaction, job stress and job productivity. COVID-19 findings. PLoS ONE, 17(3):e0265131. DOI: 10.1371/journal.pone.0265131
- [30]. Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: Characteristics and outcomes of telework. International Journal of Manpower. https://doi.org/10.1108/ IJM-07-2017-0172
- [31]. Ng, C. F. (2010). Teleworker's home office: An extension of corporate office? Facilities, 28 (3), 137–155. https://doi.org/10.1108/02632771011023113
- [32]. Noonan, M.C., & Glass, J.L. (2012). The hard truth about telecommuting. Monthly Labor Review 135(6), 38-45
- [33]. O'Hara, C. (2014). 5 Ways to work from home more effectively. Harvard Business Review. Available at: https://hbr.org/2014/10/5-ways-to-work-from-home-more-effectively (accessed 3 August 2022)
- [34]. Patanjali, S., & Bhatta, N.M.K. (2022), Work from home during the pandemic: The impact of organizational factors on the productivity of employees in the IT industry. Vision, 1-13. DOI: 10.1177/09722629221074137
- [35]. Rožman, M., Sternad, S., Bobek, S. & Tominc, P. (2021). Gender differences in work satisfaction, work engagement and work efficiency of employees during the COVID-19 pandemic: The case in Slovenia. Sustainability, 13(16): 8791. DOI: 10.3390/su13168791
- [36]. Shaikh, N., Pawar, K., Kasat, K., & Deshpande, A. (2021). Job satisfaction analysis of female employees of IT Sector working from home during the pandemic of COVID-19 using interaction effect. Journal of Contemporary Issues in Business and Government, 27(1), 2101-2108. https://cibg.org.au/
- [37]. Sirgy, M.J., & Lee, D. (2016). Work-Life balance: A quality-of-life model. Applied Research in Quality of Life, 11(4). DOI: 10.1007/s11482-015-9419-6
- [38]. Stefanova V, Farrell L, Latu I. (2021). Gender and the pandemic: Associations between caregiving, working from home, personal and career outcomes for women and men. Current Psychology, 1-17. DOI: 10.1007/s12144-021-02630-6.
- [39]. Sutarto, A.P., Wardaningsih, S., & Putri, W.H. (2022). Factors and challenges influencing work-related outcomes of the enforced work from home during the COVID- 19 pandemic: Preliminary evidence from Indonesia. Global Business and Organizational Excellence, 41(5):14–28. doi: 10.1002/joe.22157.
- [40]. Tejero LMS, Seva RR, Fadrilan-Camacho VFF. (2021). Factors associated with work-life balance and productivity before and during work from home. Journal of Occupational & Environmental Medicine, 63(12), 1065-1072. doi: 10.1097/JOM.000000000002377.
- [41]. Tietze, S., & Nadin, S. (2011). The psychological contract and the transition from office-based to home-based work. Human Resource Management Journal, 21(3), 318-334. DOI: https://www.peoplematters.in/news/employee-relations/tech-layoffs-2023-companies-that-have-made-cuts-36867
- [42]. Wang, B., Liu, Y., Qian, J., Parker, S.K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. Applied Psychology, 70(1), 16-591. doi: 10.1111/apps.12290.

- [43]. Wang, B., Schlagwein, D., Cecez-Kecmanovic, D., & Cahalane, M. (2020). Beyond the factory paradigm: Digital nomadism and the digital future(s) of knowledge work post-COVID-19. Journal of the Association for Information Systems, 21(6), 1379-1401 doi: 10.17705/1jais.00641
- [44]. Xiao Y, Becerik-Gerber B, Lucas G, Roll SC. (2021). Impacts of working from home during COVID-19 pandemic on physical and mental well-being of office workstation users. Journal of Occupational & Environmental Medicine, 63(3):181-190. doi: 10.1097/JOM.0000000000002097.
- [45]. Yu, J., & Wu, Y. (2021). The impact of enforced working from home on employee job satisfaction during COVID-19: An event system perspective. International Journal of Environmental Research and Public Health, 18(24), 13207. https://doi.org/10.3390/ijerph182413207. Acknowledgments: The authors would like to gratefully acknowledge the assistance of Psychology (Hons) batch of 2022 for their immense support in shaping the study, collecting data and analyzing it, especially Tanushka Bhatia