

**A critical study on the work from home facility and
it's impact on employees' satisfaction and
employees' performance in the service sector**

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Table of Contents

1.	Introduction	4
1.1	Problem Statement:.....	5
1.2	Significance of the Study.....	5
1.3	Theoretical Framework.....	6
1.4	Scope of the study	8
1.5	Research Motivation.....	8
2.	Literature Review	9
2.1	Research Gap	11
3.	Research Methodology	12
3.1	Research Questions:	12
3.2	Research Objectives:.....	12
3.3	Research Hypothesis:.....	12
3.4	Research Design.....	13
3.5	Measures Used	15
3.6	Pilot Study	15
3.7	Data Collection.....	16
3.8	Statistical Analysis Tool.....	16
4.	Data Analysis.....	17
4.1	Mann-Whitney U-Result	17
4.2	Structural Equation Modelling Analysis.....	18
4.3	Measurement Model Analysis	18
4.4	Factor Loading.....	18
4.5	Reliability Analysis.....	18
4.6	Validity Analysis	19
4.7	Structural Model Analysis	20
4.8	Multicollinearity Analysis.....	20
4.9	Coefficient of Determinant (R^2) Analysis	21
4.10	In-sample Predictive Power Analysis (Q^2 Analysis)	21
4.11	Relationship Testing.....	22
4.12	Mediation Analysis.....	22
4.13	Moderation Analysis	23
5.	Results, Discussions & Conslusions.....	24
5.1	Theoretical Implications.....	26
5.2	Practical Implications	27

5.3	Managerial Implications.....	28
5.4	Limitations & Future scope	28
5.5	Conclusion.....	29
6.	Bibliography	30

SYNOPSIS

1. Introduction

In recent years, the global workforce landscape has undergone a significant transformation with the proliferation of work-from-home (WFH) arrangements. The advent of digital technologies and the increasing emphasis on flexibility in employment practices have catalyzed this shift, particularly in the service sector. This sector, which encompasses a wide array of industries such as information technology, finance, customer service, and consulting, has witnessed a surge in remote work adoption. The concept of WFH refers to a work arrangement where employees perform their job duties from a location other than the traditional office setting, typically from their homes. This arrangement offers numerous benefits to both employers and employees, including reduced commuting time and costs, greater flexibility in managing work-life balance, and potentially higher productivity. However, the transition to remote work also poses challenges, particularly concerning employee satisfaction and performance. Employee satisfaction, a critical aspect of organizational success, encompasses the perceptions and feelings employees have about their work and work environment. It is influenced by various factors, including job autonomy, interpersonal relationships, and overall job experience. In the context of WFH, employee satisfaction becomes a focal point of inquiry, as the remote work environment introduces unique dynamics that can either enhance or diminish satisfaction levels. Moreover, the impact of WFH on employee performance is a topic of significant interest and debate. While proponents argue that remote work can lead to increased productivity due to fewer distractions and greater autonomy, skeptics raise concerns about potential drawbacks such as reduced collaboration and communication barriers. Understanding the relationship between WFH and employee performance is essential for organizations seeking to optimize their remote work strategies. Furthermore, several demographic factors, including age, gender, and job designation, may moderate the relationship between WFH, employee satisfaction, and performance. These demographic variables can influence how individuals perceive and adapt to remote work arrangements, thereby shaping their overall experience and outcomes. Exploring the moderating effects of age, gender, and designation can provide valuable insights into the nuanced nature of WFH dynamics within the service sector. Given the increasing prevalence of remote work and its implications for organizational effectiveness, there is a growing need for empirical research to examine the multifaceted effects of WFH on employee satisfaction and performance in the service sector. This critical study aims to address this gap by investigating the mediating role of employee satisfaction and the moderating effects of age, gender, and designation on the relationship between WFH and employee outcomes. Through rigorous empirical analysis, this study seeks to contribute to a deeper understanding of the complex interplay between remote work arrangements and employee well-being and performance in the service sector.

1.1 Problem Statement:

Despite the increasing adoption of work-from-home (WFH) arrangements in the service sector, there remains a gap in understanding their comprehensive impact on employees' satisfaction and performance. While remote work offers flexibility and potential productivity gains, its implications for employee well-being and organizational outcomes remain uncertain. Moreover, the role of demographic variables such as age, gender, and designation in moderating the relationship between WFH, employee satisfaction, and performance remains understudied. Thus, this critical study seeks to address the following research questions:

1. What is the relationship between work-from-home (WFH) facilities and employees' satisfaction and performance in the service sector?
2. How does employee satisfaction mediate the relationship between WFH facilities and employees' performance in the service sector?
3. How do demographic factors such as age, gender, and designation moderate the relationship between WFH facilities, employee satisfaction, and performance in the service sector?

By examining these questions, this study aims to provide valuable insights into the nuanced effects of WFH on employee outcomes in the service sector and inform organizational policies and practices to optimize remote work arrangements.

1.2 Significance of the Study

The proposed critical study on the impact of work-from-home (WFH) facilities on employees' satisfaction and performance in the service sector holds significant implications for both organizations and academia. Firstly, by delving into the relationship between WFH arrangements and employee outcomes, this research can offer valuable insights for organizations aiming to craft and implement effective remote work policies. Understanding the

factors influencing employee satisfaction and performance in a remote work setting is crucial for optimizing WFH strategies and fostering a productive work environment. Moreover, by uncovering the mediating role of employee satisfaction in the relationship between WFH and performance, this study can provide actionable insights for organizations to enhance overall employee morale and engagement. Furthermore, the study's focus on demographic variables such as age, gender, and designation as moderators presents an opportunity to identify potential disparities in the effects of WFH across different employee groups. By examining how these demographic factors influence the relationship between WFH, satisfaction, and performance, organizations can tailor their remote work policies to better meet the diverse needs of their workforce, thereby promoting inclusivity and equity within the organization. Academically, this study contributes to the existing body of research on remote work by specifically exploring its impact on the service sector and incorporating important moderators and mediators into the analysis. By advancing theoretical understanding and empirical evidence in this field, the study enriches academic literature on organizational behavior, human resource management, and remote work practices. Finally, the practical insights derived from the study can guide future research endeavours and inform organizational practices in effectively managing remote work transitions and fostering a culture of flexibility and productivity in the service sector and beyond.

1.3 Theoretical Framework

The theoretical underpinnings of this study draw upon several established theories in organizational psychology and management, including the Social Exchange Theory, Self-Determination Theory, Spill Over Theory, and Job-Demand Resource Model. Together, these theories offer a comprehensive framework for understanding the complex dynamics between work-from-home (WFH) arrangements, job satisfaction, and employee performance in the service sector.

1. **Social Exchange Theory (SET):** According to SET, individuals engage in social interactions based on the expectation of reciprocity and mutual benefit. In the context of remote work, employees may perceive WFH arrangements as a form of organizational support and flexibility provided by their employers. This perceived support can lead to a positive exchange relationship between employees and their organizations, fostering feelings of gratitude and commitment. Consequently,

employees may reciprocate this support by demonstrating higher levels of job satisfaction and performance.

2. **Self-Determination Theory (SDT):** SDT posits that individuals are intrinsically motivated to pursue activities that satisfy their psychological needs for autonomy, competence, and relatedness. When employees have the autonomy to control their work environment and schedule through WFH arrangements, they are more likely to experience a sense of autonomy satisfaction. Moreover, the flexibility afforded by remote work can enhance employees' feelings of competence and relatedness by enabling them to balance work and personal responsibilities more effectively. Consequently, WFH may positively influence job satisfaction by fulfilling employees' innate psychological needs.
3. **Spill Over Theory:** Spill Over Theory suggests that experiences in one domain of life, such as work, can spill over into other domains, such as family and leisure. In the context of WFH, employees may experience positive spillover effects from their remote work arrangements to their personal lives. For instance, reduced commuting time and increased flexibility can enhance work-life balance and overall well-being, leading to higher levels of job satisfaction. Conversely, positive experiences in the personal domain, such as supportive family relationships, can also spill over into the work domain, influencing job satisfaction and performance positively.
4. **Job-Demand Resource Model (JD-R Model):** The JD-R Model proposes that job demands and resources interact to influence employees' well-being and performance. In the context of WFH, job demands such as increased workload or blurred boundaries between work and personal life may pose challenges to employees' job satisfaction and performance. However, WFH also provides additional resources, such as autonomy, flexibility, and reduced commuting stress, which can mitigate job demands and promote positive outcomes. Consequently, the JD-R Model suggests that the balance between job demands and resources inherent in WFH arrangements can significantly impact employees' job satisfaction and performance.

By integrating these theoretical perspectives, this study seeks to provide a comprehensive understanding of the mechanisms through which WFH arrangements influence job satisfaction and, subsequently, employee performance in the service sector. The theoretical framework guides the formulation of research hypotheses and informs the selection of variables and

measures for empirical analysis, facilitating a nuanced examination of the relationships among these constructs.

1.4 Scope of the study

The scope of this study revolves around examining the impact of work from home on job satisfaction and employee performance within the Indian service sector, IT and Education sector. The geographical location has been restricted to the city of Ranchi, Jharkhand. Additionally, the extent to which organizations have implemented work-from-home policies and the support systems they have put in place to facilitate remote work has been contemplated.

1.5 Research Motivation

Understanding how remote work affects employee satisfaction and performance is crucial for maintaining productivity and engagement. Additionally, as remote work becomes more common, there's a growing interest in its impact on overall satisfaction and work-life balance. By exploring these factors in specific sectors, such as education and IT, the research aims to provide insights into sector-specific challenges and opportunities related to remote work. Furthermore, the study examines how remote work influences performance metrics like productivity and efficiency, offering practical insights for optimizing performance management in remote settings. Overall, this research seeks to offer evidence-based recommendations for organizations navigating remote work's complexities to enhance employee satisfaction and performance.

2. Literature Review

The primary objective of this literature review is to establish the theoretical and conceptual frameworks that underpin the study, with a particular focus on unravelling the intricate relationship between work from home, employee job satisfaction, and job performance.

Before the pandemic, only a limited number of senior-level managers worldwide were permitted to work remotely. Many senior-level managers were resistant to allowing their subordinates to work from home, citing reasons such as inadequate technology, concerns about productivity, challenges in compliance with employee regulations, and difficulties in supervision (Khor & Tan, 2023). It was generally believed that work from home was most suitable for specific job types, particularly those with lower task interdependence and higher autonomy (Irawanto et al., 2021). Evaluating the effectiveness of remote work during the pandemic should consider various assumptions and approaches. It is assumed that the location of work doesn't inherently affect one's job but that success and productivity depend on how well employees adapt to the changes and make necessary adjustments (Wang et al., 2021). A study on knowledge workers revealed an improvement in work-life balance during the pandemic, alongside a reduction in physical boundaries between the workplace and home. Furthermore, it highlights positive correlations between workplace flexibility, home office conditions, organizational support, and productivity, satisfaction, and work-life balance during the pandemic (Yang et al., 2023). Another study explored the impact of Work-from-Home (WFH) on employee productivity during the COVID-19 pandemic. It revealed a significant influence on productivity, particularly more pronounced in females. Notably, WFH proved more beneficial for women by simplifying domestic and family demands. The findings hold practical relevance for organizations, emphasizing the need for gender inclusive WFH policies, training programs, flexible work arrangements, and a continuous monitoring and adaptation strategy. Overall, the study supports the Organizational Adaptation Theory and underscores the importance of tailored and inclusive WFH strategies in response to evolving organizational behaviour (Farooq & Sultana, 2022).

Customized practices emphasizing flexibility and inclusivity are crucial for sustained employee engagement. Granting employees increased autonomy through work from home contributes to accountability for engagement in remote work scenarios (Pass & Ridgway, 2022). The impact

of work-from-home (WFH) on employee productivity and performance is multifaceted, contingent upon factors including the nature of the work, employer and industry characteristics, and home settings. Study suggests that enhancing technology infrastructure and providing comprehensive information technology (IT) training and capacity-building opportunities could lead to more substantial benefits for those inclined to continue adopting the WFH model beyond the pandemic. Such investments in technological resources and skill development are seen as pivotal for optimizing the effectiveness of remote work arrangements in the long term (Anakpo et al., 2023). Working from home impacts managers' productivity, professionalism, and work quality. The study emphasizes the importance of taking specific measures to mitigate negative impacts. It suggests that work and life integration is crucial for successful remote work (Timotius, 2023). Another study suggests that factors such as dedication, disposition, and determination serve as intrinsic motivators, while configuration, collaboration, and coordination act as extrinsic motivators (Tudu & Singh, 2023).

Another study suggest that working from home has a positive impact on employee motivation and job performance among lecturers in the east coast of the Peninsular of Malaysia. This heightened motivation translated into enhanced job performance, indicating that the shift to remote work arrangements has been beneficial for these lecturers. The study's results imply that the flexibility and autonomy afforded by working from home may contribute to increased motivation among employees. Additionally, the reduced commute time and flexibility in managing personal and professional responsibilities may contribute to higher levels of motivation and productivity among employees (Ishak et al., 2022). Approximately two-thirds of employees experience increased productivity when working from home, attributed to better time management and reduced travel (Febriani & Sopiaah, 2022). The study identifies normative commitment and intrinsic motivation as significant factors directly influencing both employee job satisfaction and performance in the WFH context. Additionally, the results reveal a partial mediating role of job satisfaction on employees' performance through their commitment to WFH (Sultana et al., 2021). Individuals working in home offices associated with higher levels of SES report a greater sense of control over their environment, leading to higher perceived job performance. Additionally, the study suggests that the amount of time spent in the home office strengthens the relationship between environment-based socioeconomic status and personal sense of control. Overall, the research highlights how home working environments, influenced by SES gradients, may exacerbate pre-existing inequalities during the pandemic (Loignon et al., 2024).

2.1 Research Gap

1. There is a gap in understanding how demographic factors such as age, gender and designation interact with remote work experiences to shape employee satisfaction and performance.
2. There is a lack of research that delves into how the impact of remote work on employee satisfaction and performance may vary within these specific sectors. Each sector possesses unique characteristics, work cultures, and job requirements that may influence the effects of remote work arrangements differently.
3. While some studies have focused on either employee satisfaction or performance in relation to remote work, there is a gap in research that comprehensively examines both aspects concurrently.
4. There is a gap in research that examines the unique implications of hybrid work arrangements on employee satisfaction and performance, particularly within the education and IT sectors.
5. Most of the literature on Work from Home and employee job performance is normative and descriptive, lacking empirical investigation new normal situation.

3. Research Methodology

3.1 Research Questions:

1. Main Relationship: Work-from-Home and Employee Performance
 - What is the direct impact of the work-from-home arrangement on employee performance?
2. Mediating Relationship: Work-from-Home, Employee Job Satisfaction, and Employee Performance
 - To what extent does employee job satisfaction mediate the relationship between working from home and employee performance?
3. Moderating Effects: Age, Gender, and Experience
 - How do age, gender, and experience moderate the relationship between working from home and employee performance?
 - Are there significant differences in the relationship between working from home and employee performance based on employees' age, gender, and experience?

3.2 Research Objectives:

1. To critically examine the impact of the work-from-home facility on employees' satisfaction and performance within the service sector
2. To investigate the mediating role of employee job satisfaction in the relationship between work from home and employee performance
3. To assess the moderating effects of age, gender, and designation on the relationship between remote work, employee job satisfaction, and performance in the service sector
4. To compare the impact of work from home on job performance between employees in the education and IT sectors, considering differences in nature and work characteristics

3.3 Research Hypothesis:

H1: There is a significant direct impact of the work-from-home facility on employee performance in the service sector.

H2: There is a significant direct impact of the work-from-home facility on employee job satisfaction in the service sector.

H3: Employee job satisfaction has a significant impact on employee performance in the service sector.

H4: Employee job satisfaction mediates the relationship between working from home and employee performance.

H5: Age, moderate the relationship between working from home and employee performance.

H6: Gender, moderate the relationship between working from home and employee performance.

H7: Designation moderate the relationship between working from home and employee performance.

H8: There is significant difference on employee performance for service sector employees (Education and IT)

3.4 Research Design

Sampling Unit – For this research we have focused on employees within organizations, the sampling unit could be individual employees. For the educational aspect, the sampling unit encompasses colleges, or universities in Ranchi, depending on the focus of the research. Concerning IT firms, the sampling unit pertains to individual companies or organizations operating in the IT sector in Ranchi. For a more detailed examination, the sampling unit might also extend to individual IT professionals, developers, or other relevant personnel within these firms.

Sample subject – For the educational component, sample subjects include faculty, administrators, or educational professionals from the selected schools, colleges, or universities in Ranchi. Furthermore, for IT sector, sample subjects may comprise employees, managers, or other relevant personnel within the chosen IT firms or organizations in the region.

Population – For present research focus education and IT firms in Ranchi, Jharkhand, the population would include all relevant entities within these domains in the specified geographic area. For the educational aspect, the population might encompass all colleges and universities, teachers, and educational professionals in Ranchi. In the realm of IT firms, the population could consist of all IT companies, employees, managers, and associated professionals operating within the specified region.

Sample size – To ensure the study achieved an appropriate sample size, a comprehensive three-fold approach was employed. Firstly, the G*power analysis program, as recommended by (Cunningham & McCrum-Gardner, 2007), was utilized to estimate the minimum required sample size for this study, which came to 146. In addition, Cochran's formula, following the guidelines of (Woolson et al., 1986), was applied to assess the adequacy of the sample size, that came to 385, with design effect of 2.00 it is 650. Finally, the rule of thumb, emphasizing a minimum of 10 times the number of variables, as suggested by (VanVoorhis & Morgan, 2007), it is 570. Hence 650 was taken into consideration during the finalization of the sample size.

Sampling Technique – Random Sampling Technique is used to provide an unbiased and systematic approach to sample selection for the research in the IT and education sectors.

Sampling Criteria – Participants must be at least 21 years old, ensuring a level of maturity and experience in the workforce. Additionally, individuals included in the study must have completed a graduation-level education.

Test Administration – A standardized questionnaire was meticulously crafted in both hard copy and in Google form to ensure convenience of respondents.

3.5 Measures Used

General Information included age, gender, marital status, education and designation.

Work Form Home – The variable "WFH" (Work From Home) was assessed using a 32-item scale adapted from Almahamid.,(2022). These items were systematically categorized into six distinct dimensions, flexible work location, work life balance, workplace design at home, communication, culture and motivation, satisfaction

The variable employee job performance was assessed using a 12-item scale adapted from Rahman., (2022).

The variable employee job satisfaction was assessed using a 6-item scale adapted from Homburg., (2002). Participants were asked to express their agreement level with each item using a 5-point Likert scale, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

3.6 Pilot Study

In this research study, pilot study was conducted with a sample size of 45 respondents. Data was collected using a 5-point Likert survey questionnaire that consisted of multiple questions for each variable examined in the study. These 45 respondents ranged from different managerial and non-managerial employees of the Education and IT industries from the service sector.

Sl.no	Particulars	No. of items	Cronbach's Alpha
1	Work from Home	32	.848
2	Employee Job Performance	12	.910
3	Employee Job Satisfaction	6	.927

Cronbach's alpha value above .7 is considered acceptable, indicating a high level of internal consistency among the questions asked for the independent variables. In all of the aforementioned tests, the results exceeded .8, providing strong evidence for the reliability of these three independent variables.

3.7 Data Collection

Both hard copy questionnaires and Google Forms have been used for data collection. A request letter was submitted to the competent authority seeking permission for data collection within IT and education sector firms in Ranchi, Jharkhand.

3.8 Statistical Analysis Tool

Smart-PLS – Structural Equation Modelling (SEM)

Smart-PLS enables us to construct and test theoretical models that depict relationships among variables. It assesses measurement validity, estimates structural paths, evaluates model fit, and conducts bootstrapping analysis for robustness.

ANOVA (Analysis of Variance)

ANOVA analyses differences in means among groups. We use it to assess how demographic variables (age, gender, designation) moderate the relationship between WFH, employee satisfaction, and performance. ANOVA provides F-statistics and post-hoc tests to identify significant group differences.

4. Data Analysis

For data collection, the structured questionnaire of the study was administered in the city of Ranchi, the capital of Jharkhand, India and mainly five basic demographic criteria were considered to represent a broad profile of the total sample of the respondents, i.e., Gender, Age, Sector, marital status, department and job designation.

Gender – The total sample consists of 653 respondents, out of which 334 are female respondents and 319 are male respondents. The percentage distribution of male and female participation is 48.85% and 51.15% respectively.

Age – The respondents are divided into five categories of age groups ranging from less than 25 years to 41 years & above. The age distribution of our sample highlights that most of the respondents out of a total of 653 respondents are between the age group of 26 to 30 years and can be considered as the target group to study their job performance.

Sector – The occupation of the respondents is divided into two groups- educational sector and IT sector. Out of the total 653 respondents, educational sector constitutes of 42.42% (277 respondents) and 376 respondents (57.58%) belong to IT sector employees.

Designation – The designation of the respondents is divided into two groups-managerial and non-managerial. Out of the total 653 working professionals, the respondents in the managerial position consists of 104 (15.93%) employees while the respondents in the non-managerial position are 549 (84.07%).

4.1 Mann-Whitney U-Result

Our study data do not meet the requirement of normal distribution; hence, we have used the Mann-Whitney U Test (alternative for Independent sample t-test) for analysing the effect of occupation of the respondents with the employee job performance.

For Employees' Job Performance, the tests revealed insignificant differences in the EJP of employees of IT sector (Median = 3.833, n = 376) and employees of Education sector (Median = 3.833, n = 277), $U = 49112.500$, $z = 1.247$, $p = 0.212$, $r = 0.0485$ (small effect size). Hence, the hypothesis H8 (there is a significant difference between employees of IT sector and educational sector in their Job Performance) is not supported.

4.2 Structural Equation Modelling Analysis

The researcher opted for SmartPLS 4.0 software as the primary tool for executing Partial Least Square Structural Equation Modelling (PLS-SEM), a sophisticated technique chosen for the in-depth analysis and validation of hypothesized relationships within the dataset. PLS-SEM, belonging to the Structural Equation Modelling category, was selected for its adaptability to datasets exhibiting non-normal data patterns, as suggested by experts in the field (J. F. Hair et al., 2011; Hair Jr et al., 2021; Wong, 2013).

4.3 Measurement Model Analysis

Initially consisting of 700 collected responses, the dataset was refined to 653 respondents, excluding 47 responses that did not meet a predetermined criterion of having more than 15% missing values. The resulting dataset of 653 responses serves as a robust foundation for the subsequent hypothesis testing phase, guaranteeing the reliability and credibility of the analytical framework.

4.4 Factor Loading

In the initial stage of the Measurement Model Analysis, a thorough assessment was undertaken to ensure that only constructs exhibiting satisfactory levels of reliability and validity were included in the subsequent structural path model. The original set comprised 50 items. However, it was noted that two items—WFH4 and WFH17—demonstrated factor loadings below the recommended threshold value of 0.60 (Dash & Paul, 2021; J. Hair et al., 2010). Consequently, these items were deemed unsuitable for the model and were subsequently excluded from further consideration.

4.5 Reliability Analysis

To establish the dependability of the adapted measures, a thorough examination was undertaken using Cronbach's alpha, where the computed values, falling within the range of 0.96 to 0.98, consistently surpassed the conventional threshold of 0.70. The analysis extended to composite reliability coefficients (ρ_c), where the obtained coefficients, falling within the range of 0.968 to 0.981, exceeded the acceptable threshold of 0.60 (Fornell & Larcker, 1981; Hair Jr et al., 2021).

Variables	Cronbach's alpha	Composite reliability (rho_c)
EJP	0.968	0.972
JS	0.96	0.968
WFH	0.98	0.981

Reliability Analysis

4.6 Validity Analysis

In this segment, both Convergent and Discriminant validity were examined to ensure the constructs' validity

Regarding convergent validity, the examination of Average Variance Explained (AVE) revealed values ranging from 0.500 to 0.633 surpassing the recommended threshold of 0.5 (Hair et al., 2011). This indicates a commendable level of convergent validity, suggesting that each latent variable effectively explains more than half of the observed variance in its associated indicators.

Variables	Average variance extracted (AVE)
EJP	0.743
JS	0.835
WFH	0.636

Convergent Validity

In the pursuit of validating the measurement model, discriminant validity was assessed employing the concept of Heterotrait-Monotrait (HTMT) ratio approach.(J. F. Hair et al., 2013). While many authors consider a threshold of >0.90, Henseler et al. (2015) argue that the HTMT ratio must be less than 1 to ensure the discriminant validity of constructs.

	Age	Designation	EJP	Gender	JS	WFH	Gender x WFH	Age x WFH	Designation x WFH
Age									

Designation	0.005								
EJP	0.412	0.118							
Gender	0.092	0.106	0.115						
JS	0.386	0.075	0.923	0.081					
WFH	0.392	0.048	0.924	0.097	0.959				
Gender x WFH	0.083	0.075	0.561	0.058	0.622	0.651			
Age x WFH	0.007	0.048	0.366	0.297	0.314	0.354	0.243		
Designation x WFH	0.279	0.041	0.618	0.009	0.592	0.646	0.292	0.188	

Heterotrait-Monotrait (HTMT) ratio

4.7 Structural Model Analysis

Key assessment criteria include the coefficient of determination (R^2), the Q^2 measure derived from blindfolding cross-validation, and the statistical significance and relevance of the path coefficients.

4.8 Multicollinearity Analysis

Multicollinearity analysis is a statistical technique used to identify and assess the extent of multicollinearity in a regression model. Multicollinearity occurs when independent variables in a regression model are highly correlated with each other. This can cause issues such as unstable parameter estimates, inflated standard errors, and difficulties in interpreting the effects of individual predictors. In this study, all VIF values for the items were found to be below 10, aligning with the recommended threshold (Ringle et al., 2020; Sarstedt & Mooi, 2014), confirming the absence of collinearity issues. This meticulous scrutiny assures the integrity and reliability of the structural model coefficients, establishing a sturdy foundation for subsequent analyses and interpretations.

4.9 Coefficient of Determinant (R^2) Analysis

The coefficient of determination (R^2) is a pivotal metric, indicating the degree of variance elucidated in each of the endogenous constructs and thereby reflecting the model's explanatory capability. Standard benchmarks propose R^2 values of 0.75, 0.50, and 0.25 as substantial, moderate, and weak, respectively (J. F. Hair et al., 2013; Henseler et al., 2015). In this investigation, the R^2 values range from 0.853 to 0.87, indicating a moderate to substantial predictive power of the model, aligning with established guidelines.

	R-square	Predictive Power
EJP	0.853	Substantial
JS	0.87	Substantial

R^2 Values

4.10 In-sample Predictive Power Analysis (Q^2 Analysis)

To assess the predictive precision of the PLS path model, an additional metric, Q^2 , is utilized (Geisser, 1974; Stone, 1974). Q^2 values surpassing 0, 0.25, and 0.50 signify small, medium, and large predictive relevance of the PLS-path model. In the current study's context, the Q^2 values are 0.826 for EJP and 0.869 for JS. These values indicate a medium to strong level of predictive relevance for the model, underscoring its effectiveness in anticipating outcomes.

	Q^2 predict	Predictive Power
EJP	0.826	Strong
JS	0.869	Strong

Q^2 Values

4.11 Relationship Testing

To rigorously examine the proposed hypotheses, a bootstrapping procedure was applied, involving the generation of 5000 bootstrap samples.

Hypothesis Testing

Hypothesis	Relationship	β - value	Standard deviation (STDEV)	t-value	P-value	Null Hypothesis – Accepted/Rejected
H1	WFH -> EJP	0.471	0.052	9.065	0	Rejected
H2	WFH -> JS	0.933	0.007	138.61	0	Rejected
H3	JS -> EJP	0.391	0.05	7.861	0	Rejected

4.12 Mediation Analysis

Conclusively, the mediation analysis was executed through a meticulous examination of the indirect path connecting (Work From Home) WFH and (Employee Job Performance) EJP via (Job Satisfaction) JS. The indirect pathway between WFH and EJP through JS demonstrated significance ($\beta = 0.933 * 0.391 = 0.365$, $t = 7.961$, $p < 0.0001$, (LL = 0.286, UL = 0.436). Furthermore, the total effect ($\beta = 0.836$, $t = 24.002$, $p < 0.001$) and the direct effect ($\beta = 0.471$, $t = 9.065$, $p < 0.001$) remained significant even after introducing the mediator. Consequently, these findings affirm the pivotal role of JS as a complementary partial mediator in the relationship between WFH and EJP.

Indirect effect						Total effects			Direct effects			Decision	
Hypothesis	Coefficient	SE	t-value	P-value	Percentile bootstrap	Coefficient	t-value	P-value	Coefficient	t-value	p-value		
					Lower	Upper							
H4: WFH-> JS-> EJP	0.091	0.034	2.697	0.004	0.057	0.158	0.837	18.475	0.000	0.746	10.987	0.000	Supported (Partial Mediation)

4.13 Moderation Analysis

The central aim of this investigation is to unravel how gender, age, and designation influence not only the strength but also the direction of the association between WFH and EJP. Our hypotheses (H5, H6, H7) put forth the proposition that these demographic variables act as moderators, introducing variability and complexity into the straightforward relationship between WFH and job performance.

5. Results, Discussions & Conclusions

The findings of the analysis indicate that there are no statistically significant differences in job performance between employees in the IT and Education sectors. Despite the initial expectation that there might be variations in job performance due to the distinct nature of these industries, the results suggest otherwise. The median job performance scores for both sectors were found to be identical at 3.833. This lack of distinction was further supported by the non-significant Mann-Whitney U test ($U = 49112.500$, $z = 1.247$, $p = 0.212$). The effect size, indicated by $r = 0.0485$, was considered small, further reinforcing the absence of substantial differences. It's possible that the criteria for assessing job performance were not sensitive enough to capture nuanced differences between the sectors. Additionally, both sectors may share commonalities in terms of the skills and competencies required for job roles, thereby minimizing discrepancies in performance levels.

The findings indicate a strong and statistically significant positive association between the availability of WFH facilities and EJP. Hypothesis 1, which posited that WFH facilities would have a positive impact on EJP, is supported by the obtained result ($\beta = 0.471$, $t = 9.065$, $p < 0.001$). The robust and significant positive association between WFH facilities and EJP suggests that remote work arrangements can indeed enhance employees' job performance. WFH provides employees with greater flexibility and autonomy in managing their work schedules, which can lead to increased productivity and efficiency.

The analysis revealed a robust and statistically significant positive correlation between WFH and JS, providing substantial support for Hypothesis 2, which posited that the influence of WFH on JS would be significantly positive ($\beta = 0.933$, $t = 138.61$, $p < 0.001$). WFH provides flexibility and autonomy, aiding in work-life balance and boosting job satisfaction. It reduces stress by eliminating commuting time. Additionally, it fosters freedom and empowerment, enhancing task prioritization and job satisfaction. Research supports these benefits, as shown by Niebuhr et al. (2022) and Bellmann & Hübler (2021).

The aim of this study was to investigate the relationship between Job Satisfaction (JS) and Employee Job Performance (EJP), with Hypothesis 3 proposing a positive and significant impact of JS on EJP. The analysis revealed a strong and statistically significant positive connection between job satisfaction and employee job performance ($\beta = 0.391$, $t = 7.861$, $p < 0.001$), providing substantial validation for Hypothesis 3. Employee job satisfaction correlates

with increased motivation, productivity, and lower stress levels, thus fostering job performance. Factors like meaningful work, autonomy, and supportive work environments contribute to job satisfaction. Positive job satisfaction leads to behaviors like organizational citizenship, further enhancing organizational effectiveness. Research, including meta-analyses by Iaffaldano & Muchinsky (1985) and studies by Alessandri et al. (2017) and Arnold et al. (2016), consistently support the link between job satisfaction and job performance across various industries. This study confirms Hypothesis 3, emphasizing the importance of prioritizing employee well-being to enhance organizational outcomes.

In this study, mediation analysis explored the connection between Work From Home (WFH), Employee Job Performance (EJP), and Job Satisfaction (JS). Results showed a significant indirect effect ($\beta = 0.365$, $t = 7.961$, $p < 0.0001$) of WFH on EJP through JS, indicating JS acts as a partial mediator. Additionally, the total effect ($\beta = 0.836$, $t = 24.002$, $p < 0.001$) and direct effect ($\beta = 0.471$, $t = 9.065$, $p < 0.001$) of WFH on EJP remained significant, revealing nuanced dynamics. The findings suggest that while WFH directly impacts EJP, part of its effect is transmitted through JS. These results align with prior research on the mediating role of job satisfaction in work-related factors and job performance. For instance, Baron and Kenny (1986) proposed a mediation model involving job satisfaction, while Zhao et al. (2010) supported its mediating role in organizational factors and employee outcomes. Jamal et al. (2021) demonstrated job satisfaction's partial mediation between telecommuting and job performance. Overall, this study underscores job satisfaction's role as a partial mediator in the WFH-EJP relationship, offering insights for organizations aiming to optimize remote work policies and boost employee performance.

Analysis showed a non-significant moderation effect ($\beta = -0.043$, $t = 1.035$, $p = 0.15$), indicating gender does not significantly alter WFH's impact on job performance in our sample. These findings shed light on gender dynamics and remote work outcomes, emphasizing the complexity of gender-related factors in this context. While not supported, this result underscores the need for further investigation into how gender influences job performance in remote settings. Prior research has explored gender differences in remote work preferences and perceived productivity, but the interaction between gender and WFH's impact on job performance remains understudied. Additionally, considering contextual factors like organizational culture and leadership styles may provide deeper insights. Though our study didn't find significant evidence, it underscores the importance of exploring gender dynamics in

remote work and understanding how they intersect with other factors to shape job performance outcomes.

The analysis revealed a significant interaction between age and working from home (WFH) on employee job performance (EJP), confirming Hypothesis 6 (H6) with $\beta = -0.058$, $t = 2.399$, $p = 0.008$. This indicates age plays a crucial role in how WFH affects job performance, particularly with younger employees experiencing a more pronounced negative impact. Consistent with prior research, younger employees may struggle more with remote work challenges such as managing distractions and maintaining focus (van Zoonen et al., 2021; Wang et al., 2021). Considering age-related differences in work preferences and technological proficiency is vital when implementing remote work policies (De Lange et al., 2010). Younger employees, while familiar with digital tools, may face difficulties in balancing work-life boundaries, potentially leading to decreased performance. Conversely, older employees, with more experience and established routines, may adapt better to remote work and possess stronger communication skills. Therefore, organizations should tailor support to assist younger employees in maintaining optimal performance in flexible work environments.

The analysis on the interaction between job designation and remote work (WFH) on employee job performance (EJP) produced significant results, supporting Hypothesis 7 (H7). With a moderation effect indicated by $\beta = 0.092$, $t = 2.459$, and $p = 0.007$, it's evident that WFH's impact on EJP varies across job titles. Specifically, WFH appears to have a stronger positive influence on job performance for certain designations. This aligns with prior research showing that employees in roles like knowledge workers or project-based positions may benefit more from remote work due to task nature and autonomy (Bellotti et al., 2021; Reiche, 2023). Higher-level designations, such as managers, may leverage WFH more effectively due to greater autonomy and decision-making authority, enhancing job performance. Conversely, employees in more structured roles or lower-level designations may face challenges adapting to remote work. Therefore, organizations should tailor remote work strategies to suit diverse job roles, ensuring WFH arrangements positively contribute to job performance.

5.1 Theoretical Implications

Incorporating gender, age, and designation into theoretical frameworks like Social Exchange Theory, Self-Determination Theory, and Job Characteristics Theory offers comprehensive

insights into how individual traits interact with WFH arrangements to shape employee outcomes. These frameworks shed light on the intricate dynamics of remote work environments, considering aspects such as social reciprocity, intrinsic motivation, and job characteristics. Understanding and addressing these dynamics can help organizations create inclusive and effective remote work settings that enhance employee well-being, performance, and satisfaction across diverse demographic groups and job roles. These findings highlight the significance of offering WFH opportunities in modern work environments, aligning with established theoretical frameworks and yielding positive outcomes for both employees and organizations. Leveraging these theoretical principles, organizations can develop interventions and policies to effectively improve employee well-being, performance, and satisfaction within remote work contexts.

5.2 Practical Implications

Organizations – To optimize remote work policies, organizations should invest in technology infrastructure, providing tools for seamless communication and collaboration. Training programs can help employees adapt, covering time management and work-life balance. Tailoring policies based on factors like gender, age, and designation ensures inclusivity. Promoting work-life balance and implementing monitoring mechanisms support employee well-being and performance alignment with organizational goals.

Employees – Employees can benefit by advocating for flexible work arrangements, leveraging the positive correlation between remote work and job performance. Setting clear boundaries, establishing dedicated workspaces, and managing time effectively contribute to productivity and well-being.

Society – Remote work's increasing prevalence offers opportunities for policymakers to shape labor policies and infrastructure development. Policies supporting remote work adoption can boost economic productivity, reduce traffic congestion, and minimize environmental impact. Community leaders can advocate for shared remote work facilities to ensure inclusivity.

In summary, optimizing remote work arrangements benefits organizations, employees, and society by enhancing well-being, performance, and sustainability in the modern workforce landscape.

5.3 Managerial Implications

1. Managers can leverage study insights to refine remote work policies and practices. This includes assessing technology infrastructure and providing training for effective remote collaboration.
2. Prioritizing initiatives to enhance employee engagement and well-being is crucial, fostering a supportive remote work culture and offering flexible work schedules.
3. Establishing clear performance expectations, conducting regular check-ins, and providing feedback are vital for managing remote teams effectively.
4. Managers should consider diversity and inclusion when designing remote work policies, ensuring equitable access and accommodations for all employees.
5. Investing in training and development programs helps employees adapt to remote work and build essential skills.

In summary, managerial implications encompass optimizing policies, enhancing engagement, improving performance management, fostering diversity, and investing in training to create a supportive remote work environment that promotes employee well-being and organizational success.

5.4 Limitations & Future scope

Limitations of this study include its cross-sectional design, hindering causal inference. Focusing solely on the IT and Education sectors may limit generalizability to other service sectors. The sample's lack of diversity within the service industry may affect external validity. Reliance on self-reported measures for employee satisfaction and performance introduces potential biases. Future research could employ longitudinal designs, broaden sector representation, and use objective performance metrics to mitigate these limitations.

Regarding future research, exploring new moderating variables like organizational culture or leadership styles could enrich understanding. Investigating mediating mechanisms such as work-life balance or job autonomy may reveal underlying processes. Additionally, examining remote work's impact on turnover intentions or organizational commitment could broaden insights. Employing a mixed-methods approach combining quantitative and qualitative analyses could capture both numerical trends and qualitative experiences. Adopting a multi-level analysis approach would enable exploration of how individual and organizational factors interact to influence remote work outcomes. Addressing these avenues can advance

comprehension of remote work's effects on employee satisfaction and performance in the service sector.

5.5 Conclusion

In conclusion, the study offers valuable insights into remote work dynamics and their impact on employee performance and satisfaction. While no significant differences were found between IT and education sectors, indicating remote work benefits cut across industries, the positive associations between WFH and performance/satisfaction are robust. This underscores WFH's potential to boost well-being and productivity in modern organizations, aligning with trends towards flexible work and digital transformation. The significant moderation effects of age and designation reveal nuanced insights. Younger employees may need targeted support, while certain job roles may benefit more from WFH due to differences in autonomy or task complexity. The non-significant moderation effect of gender suggests further exploration is needed. Overall, recognizing diverse employee needs and tailoring remote work policies can optimize its benefits. However, understanding individual differences and contextual factors is crucial for effective remote work strategies in a digital era.

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