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#### **Research Article**

# Impact of Telecommuting on Work Motivation with Reference to It Industry

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#### **ABSTRACT**

Received: 29 Dec 2024 Revised: 12 Feb 2025 Accepted: 27 Feb 2025 Telecommuting, work-life balance, work motivation, and work environment are four of today's most compelling concepts for improving performance and gaining a strategic competitive advantage. The study looked into the role of work-life balance through mediating telecommuting, as well as the effect of workplace environment on motivation. The descriptive correlation method was employed. After administering a structured questionnaire to 308 work-from-home employees in India's information technology industry, the study used structural equation modeling to evaluate the results. Telecommuting has no direct effect on work motivation, according to the findings of this study. Telecommuting has a significant impact on work-life balance, which in turn has a significant impact on work motivation. The work environment has a significant impact on the relationship between telecommuting and job motivation. Further research could look into the implementation mechanism for telecommuting as part of an innovation culture for long-term human resource development in India's new normal.

**Keywords:** Work Motivation, Telecommuting, Work Life Balance, Work Environment.

#### 1. Introduction:

A work arrangement known as "Work from Home" or "Telecommuting" allows employees to do their business remotely (Anwar et al., 2021). For the employees to accomplish their jobs remotely, a wide variety of collaboration tools and software must be used. Due of its perceived usefulness to the organization, telecommuting has been brought to light and has experienced a growing adoption by various organizations internationally even before the epidemic strikes (Monteiro et al., 2019). It's important to realize that telecommuting programmers can be full- or part-time, official or informal, and initiated by an employee or a firm. According to Elizabeth (2002), a multitude of factors influence telecommuting arrangements in any workplace or firm. In contrast to employees who telecommute part-time, who do some but not all of their work from a location other than their employer's office and have limited but scheduled interactions with managers and coworkers, full-time telecommuters complete all of their work off-site, away from their employer's office.

Even though telecommuting has gained acceptance as a viable option for work arrangements, particularly in the India-based information technology sector, it has drawbacks and risks from the perspective of the organization, including unmonitored job performance, a lack of office supplies, security concerns, an unfavorable working environment, and issues with work motivation, among other things (Anwar et al., 2021). In order to further explore how telecommuting affects work motivation; the researchers can only use this information to analyze variables that will serve as mediators.

The two key research-recognized characteristics that were the focus of this study were motivation and work environment. These constructs have continually grabbed the curiosity of scholars. The purpose of this research is to look into how work-life balance and work environment affect people's motivation to work in India's information technology industry.

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#### 2. Literature Review:

# 2.1. Telecommuting:

Many academics have focused on figuring out what motivates employees to telecommute. Peters (2001) highlighted organizational variables, job characteristics, home features, and human characteristics as factors that drive employees to adopt a telecommuting technique, while specific elements affecting telecommuting remain unknown. Hartman et al. (1991) also identified less complex variables that may influence telecommuting, including measuring performance and support, daycare considerations, life satisfaction and disruption, telecommuting time spent, and occupation. The importance of organizational structure and culture is emphasized by Davies (1996) while discussing the adoption of telecommuting. Additionally, he states that organizational structure is a strategic factor that affects whether a business can implement telecommuting practices or not. Additionally, organizational culture serves as the organization's engine; therefore compatibility with culture cannot be overlooked. In which he makes clear that for an organization to gain the benefits, telecommuting practices must be supported by organizational structure and culture.

#### 2.2. Work-Life Balance:

According to Kanthisree & Devi (2013), the modern workplace entails more intellectual, knowledge-based labor that requires employers to pay close attention to their jobs at all times, even when they are not in the office. This has led to situations where work and personal life are out of harmony. Given this, it is critical to identify the factors that influence work-life balance. Opatha and Perera (2017) identify Maturity level, marital status, amount of kids, and a lack of family support are all factors to consider, and multiple responsibilities handled by a single employee as all having a high impact (quoted in McFarland 2004). Excessive jobs, long shifts, a lack of managerial assistance, and greater workplace involvement were also identified as factors affecting work-life balance. Work life balance implementation has been hampered in the modern business environment by fierce global rivalry, challenges managing a diverse workforce, and increased employee interest in work and personal values (Kanthisree & Devi 2013). Work-life balance issues have a direct impact on employee engagement, retention, and recruitment (Dhas 2015). Work-life balance has received a lot of attention from HR professionals and managers in the new millennium because it is directly related to a number of organizational outcomes, such as job satisfaction, intention to leave, efficiency, and fulfillment of organizational objectives. Making employees feel at ease while carrying out their jobs is crucial, as many large corporations have realized, as it results in people performing their tasks more effectively, which supports what Lakshmi et al (2017).

## 2.3. Work Motivation:

Employee motivation is one of the most crucial elements of workers' preventative measures (Sultana, 2021; Geemale, Goodenough, 2021). Employee motivation is defined as an impetus that propels individuals to fulfil particular goals and objectives (Shahazadi, 2014) If workers are motivated, high levels of productivity, effectiveness, and quality can result in future success and advancement (Hitika.,et al.,2020). Similar to this, according to Vydrova (2018), a company's performance and growth are essential to achieving its goals if it is to succeed. Hill (2018) and Goodenough (2021) both conducted studies to support this assertion. Strongly motivated people enjoy their jobs, whereas employees with weak motivation are lazy and more likely to violate organisational standards through disciplinary actions, a lack of drive at work, and job dissatisfaction. Strongly motivated people also enjoy their jobs. Geemale lists direction, intensity, and perseverance as the three essential elements of an incentive. (Bratu, 2018) claimed that in order to motivate all employees in the best possible way, businesses must improve their lives by encouraging social interaction and modeling human behavior in the workplace (Han, 2021).

## 2.4. Work Environment:

Researchers stated that allowing employees to work from home fosters a more adaptive work environment since they have the freedom to determine their work hours and working circumstances (Baltes et al., 1999). Because they can personalise their working space to reflect their preferences and needs, they can do so (Gajendran & Harrison, 2007). Overall, the working environment consists of all the abilities, actions, and other key factors that are present and/or may compete with, as well as employee activities and outcomes (Kohun, 2002). The technology environment, individual environment, and organisational climate are the three main sub-environments that make up the working environment, according to Opperman (2002). The term "technology environment" describes a variety of physical and

technical elements, including tools, equipment, and facilities. The human environment includes coworkers, people who people relate to, teams and job groups, engagement-related subjects, leadership, and management. This environment is designed to encourage indirect contact at work, strengthening the capacity for information sharing and idea exchange. Opperman emphasises that workplace culture affects the nature of the job, especially the level of accomplishment of employees. According to Awan and Tahir's (2015) study on employees of Pakistani banks and insurance companies, the workplace environment has a positive and significant impact on employee motivation. Darachart (2019) discovered in his research of college employees that the workplace has a positive and significant impact on motivation.

#### 3. Research Methodology:

Using a quantitative research method known as descriptive correlation, the researchers quantified the significance of the connection and influence of telecommuting as a variable, as well as the involvement of work-life balance as a mediator and work environment as a moderating factor to employee work motivation.

### 3.1 Measurement Items:

Khairudin and Aziz used a structured questionnaire with aspects of the telework association scale measured by four elements to assess the role of telework in work motivation (2019). Work life balance (4 components) was adapted from Baert., et al (2020) to analyze work life balance. Work environment (three components) was taken from Gajendran and Harison (2007), and the questions to assess work motivation were stolen from Shockey and Allen (2012), who included seven items that measured employee enthusiasm to work from home.

Indian nationals worked from home in India to form the sampling units. Following data cleansing, 308 samples were collected for analysis (Table-1, Qualitative data Statistics show the number of respondents), falling within the recommended number of respondents of 200 for PLS SEM observation (Kline, 2005). To test the assumptions, the SPSS application was utilized.

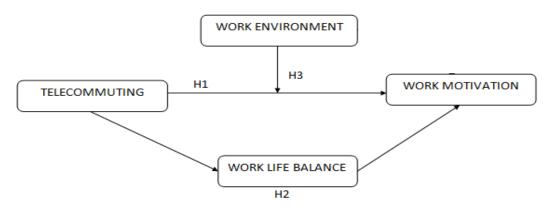


Figure 1 Conceptual Structure

### 3.2. Hypothesis Development:

The theories listed below were stated, as illustrated by the conceptual framework above:

H1: Telecommuting has a positive effect to the work motivation

H2: work life balance mediating the effect to the casual relationship between telecommuting and work motivation

H3: work environment moderates the effect of telecommuting to the work motivation

#### 3.2.1. Effect of Telecommuting on Work Motivation:

Employees were generally pleased with remote working, and the majority of them said they would do it again in the future. Respondents highlighted benefits like increased motivation for work, improved work-life balance, and increased productivity and concentration. Workers' enthusiasm to work increases when they work from home for two key reasons: Motivation and personal life Employees who telecommute are more productive because they avoid transportation and traffic costs, and they are able even live in a less expensive area, for instance a suburb, even if it

is a long distance from their workplace. People can also deal with personal issues at work, gaining a better understanding of their personal lives (Shockley & Allen, 2012).

# 3.2.2. Mediating the Role of Work-Life-Balance:

According to Hartmann et al. (1991), teleworking can help with a variety of family issues. Teleworking, according to Lautsch et al. (2009), would reduce the amount of work-related family conflict. Martinez and Gomez (2013) discovered this to be true. Telework has the possibility to blur the distinction among work and home life, potentially escalating family problems, according to Hill et al., 1998. Work-life balance had also emerged to be among the most important issues, according to Miller (2016), because telecommuting enables for flexible hours that allow individuals to manage their possess time.

# 3.2.3. Moderating the Role of Work Environment:

In general, every employee desires a pleasant working atmosphere. Good workspaces improve employee enthusiasm to work (Bakotic and Babic, 2013). The work environment is a significant driver of occupational motivation; claim Kreitner and Kanicki (2012). Employees have a tendency to stick around a place of work where they feel at ease in their professional lives. This implies that a better environment may motivate individuals to put in more effort. In addition, Jain and Kaur (2014) found that a positive workplace environment might boost employee motivation. Employee satisfaction could be increased by improving the workplace's mental, social, and physiological aspects (Agbozo et al., 2017).

# 4. Analysis and Findings:

The analysis of the study is divided into two sections: model fit analysis & structural model analysis. The conceptual framework depicts the relationship between latent and evaluated variables, whereas the measure depicts the relationship between measured and criterion variable (Table 2).

### 4.1 Evaluation Model:

The study's first stage included a converging validity test. This survey examined item loads, mean extracted variance (AVE), composite reliability (CR). The result is summarized in table 1. The article loads in the previous table were higher than 0.6, which was Hair et al suggested value (2017). The AVE cutoff point ought to be higher than 0.5. (Hair and others, 2009) The acceptable range for the AVEs in this study was between 0.610 and 0.702. Moreover, the RC exposure to a variety between 0.769 and 0.880, which corresponds to Hair et al., (2009).

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
TC	0.841	0.846	0.887	0.61
WE	0.830	0.865	0.895	0.74
WLB	0.832	0.863	0.888	0.668
WM	0.923	0.939	0.941	0.702

Table 1. Validity and Reliability

Fornell and Larcker (1981), on the other hand, argue that the Fornell-Larcker test cannot be used to demonstrate the absence of construct validity in large search fields (Henseler et al., 2015). Although it is not recommended, the Fornell-Larcker assessment is used as a guide for discriminating validity in this study. As shown in Table 2, all reflection structures have adequate or satisfactory discriminant validity, with the AVE square root (diagonal) being above the correlations (off-diagonal). The heterotrait-monotrait ratio is also recommended by Henseler et al. (2015) as a novel method for evaluating the discriminating validity of correlations (HTMT). To demonstrate the efficacy of HTMT, a Monte Carlo simulation study is also used. Because of the robustness and power of the technique, the current study used the same methodology to confirm discriminating validity. The HTMT test rule of thumb states that discriminant validity exists if the HTMT value is higher than 0.85 (HTMT0.85) or 0.90 (HTMT0.90). (Gold et al., 2001; Kline, 2011). HTMT test results are the scores for HTMT0.85 and HTMT0.90 were within acceptable ranges

(Kline, 2011; Gold et al., 2001). This demonstrates that the evaluation items' authenticity and discriminant are appropriate.

	TC	WE	WLB	WM
TC	0.781			
WE	0.791	0.860		
WLB	0.787	0.797	0.817	
WM	0.609	0.668	0.711	0.838

Table 2.Discriminant Validity

#### 4.2 Structural Model:

Figure 2 illustrates how telework, the workplace, and work-life balance affect motivation at work. With the exception of teleworking, the direct impact of endogenous variables is positive and significant (=0.016, t=0.199). The extracted values from bootstrapping show a direct positive effect of job satisfaction, work-life balance, & work motivation, with an R2 value of 0.58. (For path co-efficient value systems and t statistics for direct effects, see Table 3.) Telework improves work-life balance (=0.787, t=27.53), which leads to acceptance, according to the study.

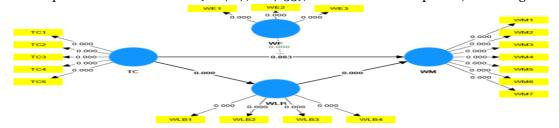


Figure 2 Structural Model

Table 3. Values of Path Coefficients and T Statistics for Direct Effects

	The original	The sample	Deviation from the	Statistics for T ( O/STDEV )	The p- values
	sample (O)	mean (M)	mean (STDEV)		
TC -> WLB	0.787	0.787	0.029	27.53	0.000
$TC \rightarrow WM$	0.015	0.016	0.075	0.199	0.842
$WE \rightarrow WM$	0.210	0.21	0.069	3.031	0.002
WLB -> WM	0.448	0.451	0.075	5.988	0.000

# 4.3 Estimation of Mediation Effect:

A mediation analysis was performed to determine the significance of work-life balance in mediating the link between telework and workplace motivation. According to the results (see table.1), telework and work motivation together had a statistically significant overall effect (H1:=0.071, t=4.781, P.000). The impact of telework and work motivation become insignificant when the mediating variable (work life balance) is taken into account (=0.075, t=0.199, P0.842). It was determined that telework had a significant indirect effect on work motivation (=0.062, t=50649, P.000). This demonstrates that work-life balance completely mediates the connection between telework and motivation at work.

Table 4. Analysis of Mediation

Actua	l effect	The Dire	ect effect		The	Indirect e	effect of TC□	WM	
Co-	p-	co-	p-value		co-				BI
effici	value	efficient			efficien			P	[25%-
ent					t	STDEV	T statistics	values	97%]
.071	.000	.075	.842	TC□WL					0.168;0.
				$B\square WM$	0.354	0.062	5.649	0	124

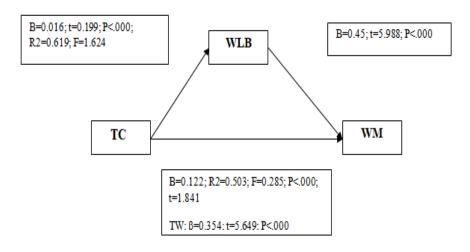


Figure 3. Mediation Analysis

#### 4.4 Estimation of Moderation Effect:

To test the moderating effect of the variable work environment, a cross-group analysis was performed. The difference in the smart- partial least square structural model trajectory coefficient for the different categories of respondents in the sample was examined using the procedures proposed by Keil et al (2000). The results show that there is a difference in the strength of the relationship's coefficient (Table 6). The results support Hypothesis H6, which states that the work environment influences the link between telework and motivation significantly (t-statistic value > 6.201 and p-value 0.000).

Table 5. Analysis of Moderation

Constructs	The Original sample (O)	The Sample mean (M)	(STDEV)	Statistics for T	The p- values	Result
WE x TC -> WM	0.161	0.159	0.026	6.201	.000	supported

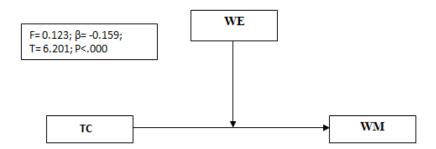


Figure 4. Moderation Analysis

## 4.5. Hypothesis Analysis:

Table 6 summarises the T statistics and the approval of hypotheses. With the exception of Telework and Work Motivation (H1), all of her hypotheses were statically important and are now approved.

Table 6. Summary of T Statistics and Hypothesis Acceptance

Нуро	Construct	T statistics (O/STERR)	Status
H1	$TC\square WM$	0.199	Not Acceptable
H2	$TC\square WLB\square WM$	5.649	Approved
Нз	$WE*TC\square WM$	6.201	Approved

#### 5. Discussions and Conclusions:

The study's objective is to find out how work-life balance and the workplace environment interact to influence employee motivation when they telecommute. This study was carried out following the COVID-19 pandemic; it then asked 308 respondents who worked in the shared information technology business to evaluate and test four hypotheses. The results demonstrate the following:

Beginning with the finding that telecommuting had no discernible impact on job motivation, this study confirms earlier findings in the field.

Next, telecommuting significantly affects it, and work-life balance significantly affects motivation at work. Both results confirmed those of earlier studies, showing that telecommuting has real advantages beyond just raising employee engagement

Additionally, the workplace environment modifies the impact of telecommuting on job motivation. According to the findings, employee motivation for telecommuting is actually the main factor influencing how well employees perform at work, in contrast to prior research that claimed that the work environment interacted with or modified the effect of telecommuting on motivation.

Finally, there is a causal connection between work-life balance and motivation made possible by telecommuting, according to research conducted by a variety of researchers. This relationship is mediated by work-life balance (Agbozo et al., 2017; Rockmann & Ballinger, 2017).

#### 5.1. Practical Implications:

These findings, in addition to the fact that the study was carried out following the pandemic, enable the Indian information technology sector to adopt and implement more adaptable working conditions and programmers. The notion that fully implementing telecommuting is a sensible and beneficial strategy for organisations is supported by the notion that it has an influence on work balance, and that work-life balance has a positive impact on employees' work motivation.

Numerous studies have found advantages including decreased absenteeism, enhanced job balance, lower losses, and reduced organizational costs for the business. This suggests that emphasising telework or telecommuting as flexible schedules may be the best course of action, particularly in the modern and post-pandemic eras.

# 5.2. Limitations of Further Research:

The scope of this investigation is restricted. In this study, only Indian subjects were used. To determine the outcomes, the obtained collected data were analyzed without the use of Maturity level, society, technology advancement, schooling, earnings, sector, and other control variables. We could learn more about the issue by looking into how birth, society, schooling, earnings, sector, and other factors influence the motivation of people who work from home. Information from other nations could be gathered to expand the scope of current research.

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