

# Work–Life Balance, Technological Support, and Team Collaboration as Predictors of Job Satisfaction & Employee Engagement in IT Sector

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**Abstract-** *This paper examines the association of work-life balance, technological support, and team collaboration with job satisfaction and employee engagement among the IT company employees performing duties in a hybrid model. Data from 265 employees of HCL, Accenture and Oracle is collected using convenience sampling, and for hypothesis testing SEM is used. Findings outline that work-life balance, team collaboration, and technological support are significantly associated with job satisfaction, while team collaboration and technological support are positively linked with employee engagement. Results outline that companies should rely on building collaborations, offering an environment which promotes work-life balance and advanced digital support to achieve a higher level of employee engagement and job satisfaction in IT sector.*

**Keywords-** *Job Satisfaction, IT sector, Employee Engagement, Team Collaboration, Work-life Balance*

## I. INTRODUCTION

In today's changing and intense corporate climate, employees have gained a competitive advantage over other resources, forcing employers to align their managerial policies with employee expectations. With changing scenarios, job satisfaction is emerging as a critical factor affecting well-being, employee engagement, and commitment towards the employer, which significantly influences their future prospects with the company. (Jiang et al., 2024) Before the epidemic, people mostly worked in regular office settings, and businesses tended not to use remote work. Technological advancements have made a hybrid work mode feasible; however, it received a

significant boost with the emergence of COVID-19, which forced businesses to go online. (Kozioł, Nadolna, 2024) The pursuit of possibilities to maintain the functioning of operations led businesses to pursue this practice.

(Saura et al., 2022) Businesses are being compelled to alter existing operations and organisational systems. The IT sector, due to its technical competence, easily adopted work-from-home (WFH) arrangements in its business operations. Even after the COVID wave, the IT sector is continuing its work operations in a Hybrid mode.

In the context of traditional in-office work mode, (Gibbs et al., 2023) WFH has potential to enhance work-life balance, boost job satisfaction, offer more flexible working hours. However, there are multiple barriers in this context, as managing work life at the same time as managing personal life becomes difficult while working from home. (Raj et al., 2023) The main difficulties faced by WFH employees were inadequate technical expertise, a lack of prior expertise, and maintaining professionalism. (Montuori et al., 2022) The work-life, including social interactions, familial ties, and perceived health, is greatly impacted by job satisfaction. A significant component of the hybrid model is its intensity, as it involves some employees working in office arrangements and others in remote arrangements. (Chatterjee et al., 2022) The idea of a hybrid model in organisations is what provides flexibility to perform their duties.

(Zhang et al., 2021) Employees associated with remote work witnessed obstacles and problems (bad internet access or interruptions in their living setting). (Gibbs et al., 2023) If their house is peaceful, some employees might find it simpler to focus. With a changing

scenario, employers need to focus on offering an environment which offers accomplishment to employees, as satisfaction with their respective jobs aligns with future prospects of employees with their current employer.

## II. REVIEW OF LITERATURE & HYPOTHESIS FORMULATION

### 2.1 Work-life Balance (WLB)

Employees are a vital asset for any company, and the policies framed by the employer influence their behaviour. The growth of the business depends on the level of accomplishment employees receive from their present job. Policies should be framed in such a way that employees don't feel any imbalances in their personal and work lives. (Veenalatha, 2019) *Journal of Emerging Technologies and Innovative Research* (Lee, 2023) Due to the improved work-life balance and reduced commute, WFH is growing in popularity among employees. (Mumu et al., 2021) Conflict between work-life and the family arises when work-related experiences and organisational obligations collide with one's personal life. (Pahuja, 2017) WLB is the practice of keeping one's private and professional lives in harmony and in an optimal state of wellness. In the context of literature, the following hypothesis is framed:

H1: Work-life balance is significantly associated with Job satisfaction of employees in IT sector.

H2: Work-life balance is significantly associated with Employee Engagement in IT sector.

### 2.2 Team Collaboration (TC)

Interaction and association among employees are vital for growth, as work performed in teamwork attracts more efficiency. (Aczel et al., 2021) The inability to interact with coworkers is one of the drawbacks of WFH. (Levi & Slem, 1995) For numerous companies, teamwork has grown into a major concern, and collaboration development initiatives frequently aim to create teams that can manage themselves. (Chatterjee et al., 2022) The assistance of the management team might allow remote employment adaptability. (Barker Scott & Manning, 2024) There is a growing emphasis on learning in collaboration. Organisations are following various practices such as informal meetups and social programs to build

relationships among the employees. Thus, the following hypothesis is framed:

H3: Team Collaboration is significantly associated with Job satisfaction of employees in IT sector.

H4: Team Collaboration is significantly associated with Employee Engagement in IT sector.

### 2.3 Technological Support (TS)

The technical equipment and the digital assistance provided by the employer to perform their duties constitute technological support. (Bhattacharjee, 2001) Sustaining long-term productivity and loyalty is fuelled by sustained IT assistance, including the accomplishments achieved from the technical equipment provided by the employer. (Spagnoli et al., 2020) In hybrid settings, IT direction and assistance reduce technological strain and enhance job satisfaction. (Boutros et al., 2023) To maximise outcomes, administrators need to come up with innovative ways to communicate with their employees and create digital initiatives. Thus, the following hypothesis are framed.

H5: Technological Support is significantly associated with Job satisfaction of employees in IT sector.

H6: Technological Support is significantly associated with Employee Engagement in IT sector.

## III. RESEARCH METHODOLOGY

To examine the influence of predictors of the Hybrid work model on job satisfaction and employee engagement in the IT sector, this study uses a convenience sampling method to collect data from 265 respondents from employees working in HCL, Accenture & Oracle using a structured questionnaire. This study analyses the association of WLB, TC & TS with JS & EE, in which the WLB construct is measured with 3 items from the scale developed by (Fisher et al., 2009; Haar, 2013), and the Team Collaboration construct with 3 items through a scale developed by (Hoegl & Gemuenden, 2001; Staples & Webster, 2008).

The technological support construct with 3 items by scale (Tarafdar et al., 2007; Venkatesh et al., 2003). Further Employee engagement construct with 3 items through a scale of (Schaufeli et al., 2006) and lastly,

the Job Satisfaction construct with 4 items through a scale developed by (Spector, 1997).

|      |      |
|------|------|
| Sig. | .000 |
|------|------|

Source: Author's Calculation

#### IV. DATA ANALYSIS & INTERPRETATION

This section demonstrates the results of data analysis and descriptive statistics of respondents. Table 1.1 outlines that 51.32% respondents are male and 48.68% are female, showing a balanced distribution between genders of employees. Around 69.81 % employees earn more than Rs. 40,000, outlining a good pay structure among employees. The majority of respondents, 46.42% of employees, are below 28 years, showing a high proportion of young talent in IT companies. In terms of work experience, 30.19% employees have less than 3 years' experience.

Table 1.1: Descriptive Statistics of Respondents

|                 |                 | No. | %     |
|-----------------|-----------------|-----|-------|
| Gender          | Male            | 136 | 51.32 |
|                 | Female          | 129 | 48.68 |
| Monthly Income  | Below 40,000    | 80  | 30.19 |
|                 | 40,000 – 60,000 | 66  | 24.91 |
|                 | 60,000 – 80,000 | 60  | 22.64 |
|                 | Above 80,000    | 59  | 22.26 |
| Age Group       | Below 28 years  | 123 | 46.42 |
|                 | 29 – 35 years   | 109 | 41.13 |
|                 | Above 35 years  | 33  | 12.45 |
| Work Experience | Below 3 years   | 80  | 30.19 |
|                 | 3-6 years       | 68  | 25.66 |
|                 | 6-9 years       | 59  | 22.26 |
|                 | Above 9 years   | 58  | 21.89 |

Source: Author's Calculation

The KMO & Bartlett test is used to identify whether the data is suitable for conducting EFA. Values of KMO > .7 are considered appropriate. Table 1.2 shows the value of .871, which is > 0.7 threshold.

Table 1.2: KMO and Bartlett's Test

|  |                    |          |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .871     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 3425.627 |
|  | Df                 | 120      |

To identify the items of each construct, factor loading is performed using varimax rotation and principal component analysis. Based on value > 0.5, factor loading extracted 16 items for constructs JS, TS, TC, EE & WLB. Table 1.3 shows the factor loading of each construct, which outlines each item score > 0.5, with the highest value of .905 for item EE2 and the lowest for .818 for TC3.

Table: 1.3 Factor Loadings

|      | Component |      |      |      |      |
|------|-----------|------|------|------|------|
|      | 1         | 2    | 3    | 4    | 5    |
| JS2  | .889      |      |      |      |      |
| JS3  | .851      |      |      |      |      |
| JS1  | .847      |      |      |      |      |
| JS4  | .831      |      |      |      |      |
| EE2  |           | .905 |      |      |      |
| EE1  |           | .885 |      |      |      |
| EE3  |           | .873 |      |      |      |
| WLB2 |           |      | .901 |      |      |
| WLB1 |           |      | .867 |      |      |
| WLB3 |           |      | .865 |      |      |
| TS2  |           |      |      | .891 |      |
| TS1  |           |      |      | .874 |      |
| TS3  |           |      |      | .868 |      |
| TC2  |           |      |      |      | .869 |
| TC1  |           |      |      |      | .838 |
| TC3  |           |      |      |      | .818 |

Source: Author's Calculation

#### 4.1 Validity & Reliability

Table 1.4 outlines the value of Cronbach's alpha, which is .911. (Cronbach, 1951) 0.7 or > 0.7 suggests the acceptable internal consistency. Table 1.5 demonstrates the value of Composite Reliability (CR) and Average Variance Extracted (AVE), which are used to check the validity of the measurement model before performing path analysis using SEM. CR > 0.7 are considered acceptable, as per Table 1.5, the highest CR is 0.932 for the work-life balance construct, and the lowest is 0.885 for the team collaboration construct; both values are above > 0.7 threshold. AVE > 0.5 are considered good, as per Table 1.5, the highest AVE value is .821 for the work-life balance construct, and the lowest is .720 for the team collaboration

construct, outlining all values above the acceptable threshold of 0.5.

Table 1.4: Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .911             | 16         |

Source: Author's Calculation

Table 1.5: CR & AVE

|                     | CR    | AVE   |
|---------------------|-------|-------|
| Job Satisfaction    | 0.925 | 0.754 |
| Work-life Balance   | 0.932 | 0.821 |
| Technical Support   | 0.915 | 0.781 |
| Team Collaboration  | 0.885 | 0.720 |
| Employee engagement | 0.928 | 0.812 |

#### 4.2 Model Fit

Table 1.6 outlines the model fit indices of the measurement model, in which CMIN/DF = 1.349, which is > 0.9 threshold, CFI = .990, which is > 0.9 criteria, GFI = .945, which is above 0.9 limit, TLI = .988, which is >0.9 acceptable threshold, AGFI = .921 & NFI = .964 which is above than acceptable limit of >0.9. RMSEA = 0.036 & RMR = 0.031, which are below the acceptable threshold of 0.08 & 0.05, respectively (Hair et al., 2019; Tucker & Lewis, 1973). As per the results in Table 1.6, it shows an acceptable model fit for the proposed measurement model as all values are above or within acceptable threshold criteria of (Byrne, 2010; Hair et al., 2019; Hu & Bentler, 1999; Tucker & Lewis, 1973)

Table 1.6: Model Fit Indices

| Indices | Value | Threshold Limit |
|---------|-------|-----------------|
| CMIN/DF | 1.349 | < 3             |
| CFI     | .990  | >0.9            |
| GFI     | .945  | >0.9            |
| TLI     | .988  | >0.9            |
| AGFI    | .921  | >0.9            |
| NFI     | .964  | >0.9            |
| RMSEA   | 0.036 | <0.08           |
| RMR     | 0.031 | <0.05           |

Source: Author's Calculation

#### 4.3 Path Analysis

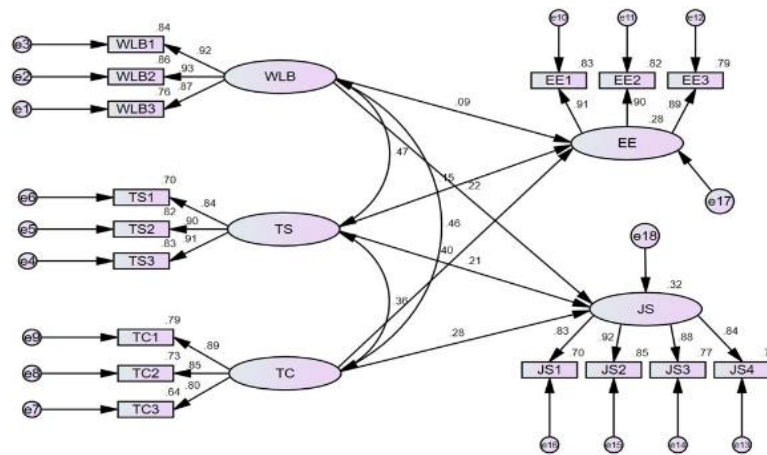
The study analysed the association between TC, TS & WLB with EE & JS among the IT sector employees. As per the result shown in Table 1.7 of the path analysis, work-life balance is not significantly associated with employee engagement among IT sector workforce services, as  $b = 0.096$ ,  $t = 1.261$  and  $P$  value = .207 thus, we reject H2, but work-life balance is significantly associated with job satisfaction as  $b = 0.200$ ,  $t = 3.118$  and  $P$  value = .002 which is below 0.05 thus we accept H1. Also, Technological Support is significantly associated with job satisfaction and work-life balance of employees in the IT sector, with  $P$ -values of 0.002 & 0.029, respectively resulting in acceptance of H5 & H6. Further,  $P$ -value < 0.001 for Team collaboration with job satisfaction and employee engagement outlines a highly significant association of team collaboration with employee engagement and job satisfaction; as a result, H3 & H4 are accepted.

Table 1.7: Path Analysis Results

|                | Estimate | S.E. | C.R.  | P    | Results             |
|----------------|----------|------|-------|------|---------------------|
| H2 EE <--- WLB | .096     | .076 | 1.261 | .207 | Hypothesis Rejected |
| H6 EE <--- TS  | .148     | .068 | 2.183 | .029 | Hypothesis Accepted |
| H4 EE <--- TC  | .518     | .093 | 5.569 | ***  | Hypothesis Accepted |
| H1 JS <--- WLB | .200     | .064 | 3.118 | .002 | Hypothesis Accepted |
| H5 JS <--- TS  | .180     | .057 | 3.160 | .002 | Hypothesis Accepted |
| H3 JS <--- TC  | .308     | .077 | 4.022 | ***  | Hypothesis Accepted |

Source: Author's Calculation

Figure 1.1: Structural Equation Model



Source: Authors' Compilation

## CONCLUSION

This study outlines the determinants of job satisfaction and employee engagement among IT company employees. Findings demonstrate that the association among employees, including superiors, is positively related to their satisfaction with their job and present employer. Organisations should focus on formulating policies, including informal meet-ups and cultural programs, to develop a collaborative bond among employees. (Staples & Webster, 2008) Companies should refrain from forming a workplace environment for hybrid or imbalanced virtual teams. The study also concludes that policies should be framed in such a way that employees will be able to achieve a good work-life balance, as WLB aligns with job satisfaction and employee engagement, which ultimately links to employee efficiency. This study suggests that the IT sector is most dynamic in nature; therefore, the role of employees is evolving due to increased demand for employees competent with AI & cloud computing, suggesting employers should focus on offering an environment which promotes work-life balance, collaboration among employees and technical support while performing their duties.

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