

Impact of Factors on Work Life Balance Due to Technology Transformation with Respect to Information Technology Employees

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Abstract

A balanced work and family life leads to a strong work life balance. Due to the increase of employment, longer working hours due to inadequate family income, target driven work culture makes it problematic for a good work life balance. It is also seen that the advancement in the digital technology have made everyone reachable beyond traditional working hours. This study focuses and investigates on the factors which influence the 'Work-Life' balance of employees in the selective IT companies. After various references from articles, a research model was derived. Remote Work (RW), Increased Communication (SE), Work Extension (WE), Permeability (PER) and Flexibility (FLE) are the independent Variables and Work Life balance (WLB) is the dependent variable taken into consideration for the study. Convenience sampling is adopted for the study. Out of the 266 questionnaires distributed, 213 responded. After neglecting the 9 incomplete or invalid responses, the sample size was determined to be 204. The study shows that remote work has a positive influence on work life balance whereas the permeability and flexibility has a significant influence on the other way.

Keywords

Remote Work, Work Extension, Permeability, Flexibility, Work Life Balance.

Introduction

Work-life balance is an issue of employee well-being related to the employee's capacity to manage personal and professional responsibilities with adequate time for relaxation. Maintaining a good work-life balance helps to decrease stress and prevent burnout in the

work environment. Technology influences and changes the quality of work-life in good and wrong. The technologies determine the level of progress. Technology is considered the solution to solve all the work issues, but today's mobile and digital world can often create more problems than solutions. Technology transformation drastically affects how we combine work and personal time from the employee's perspective. Digital technology has become a massive part of our daily personal lives, and employees can be more efficient and flexible, fitting work around their lifestyle and routine. Digital transformations enable us to be connected permanently. Its findings suggest that using the Internet and mobile technologies influences the dimensions (flexibility and permeability), types (integration, autonomy, interference, and segmentation), and consequences (job satisfaction, job stress, and overwork) of work-life balance.

Review of Literature

The literature review is performed with respect to work life balance (WLB), considering the factors like Remote Work (RW), Increased Communication (SE), Work Extension (WE), Permeability (PER) and Flexibility (FLE). Different perceptions have been made on this issue through several studies. Greenhaus and Bautell (1985) and Greenhaus et al (1989) explained the antecedents of conflict between family and work, Goodstein (1994) and Ingram and Simons (1995) presented institutional perspectives on organization's responses to work-family issues. Campbell et.al (1994) has explained the effects of family responsibilities on women's work commitment and job performance.

The effects of remote work on the association among information workers were explained by Yang et.al (2021). According to the article “The coronavirus disease, 2019 (COVID-19), pandemic caused a rapid shift to full-time remote work for many IT workers. Seeing this as a natural experiment in which some workers were already working remotely before the pandemic enables them to separate the effects of firm-wide remote work from other pandemic-related confounding factors. There was a reduction in synchronous communication and an increase in asynchronous communication”.

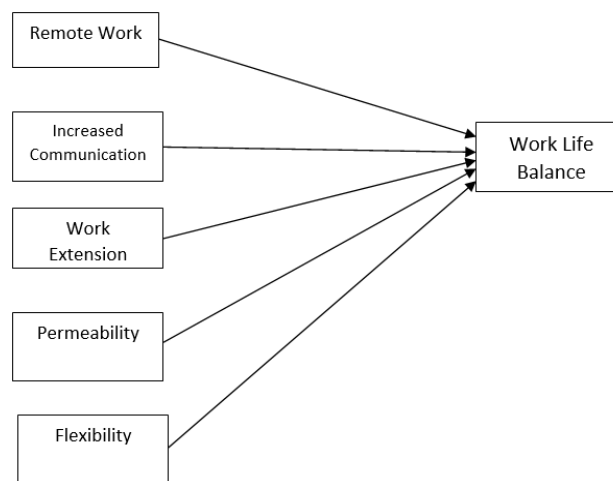
Ibrahim (2016) has discussed effective communication methods in the IT industry and how it is influential in the paper “How Technology influences Communication. Also, the types of communications within and outside of the organization are studied. Mens et.al (2005) published a research article, “Burnout: How to work extension balances job and family.” This journal discusses employee loss and retention because of work extension factors. Job satisfaction key factors are discussed and the coping skills needed to prevent employee stress due to work extension.

Article on “Work Flexibility, Job Satisfaction, and Job Performance among Romanian Employees Implications for Sustainable Human Resource Management” by Adriana and Simona (2020) explained the link between employee development and worktime and workspace flexibility as relevant characteristics of sustainable HRM, job satisfaction and job performance among Romanian employees to identify how to redesign HRM in the face of “future work” challenges. Donna (2016) published “Finding work-life balance in a digital age: An exploratory study of Boundary flexibility and permeability.” Permeability of the IT employees in work-life situations examined. The characteristics of employees with various boundary types and whether these individuals experience different levels of work-family conflict and job and life satisfaction.

Table 2.1 Constructs Definition

CONSTRUCTS	DEFINITION	REFERENCE
Work-Life balance	“Work life balance is not simply about equally dividing the time spent on one’s work and personal life, but establishing a harmony that reflects an individual’s priorities”	Bundhun (2009)
Increased communication	“Technology comes in handy in facilitating smooth communication among individuals or businesses; as it provides alternatives that lead to effective communication”	Ibrahim (2016)
Work extension	“The ability to work outside the office, outside “normal” office hours”	Towers et.al (2006)
Remote work	“Organizational work that is performed outside of the normal organizational confines of space and time”	Olson (1983)
Permeability	“Permeability is the degree to which a role allows one to be physically located in the role’s domain but psychologically and/or behaviorally involved in another role”	Pleck (1977); Richter (1992)
Flexibility	“Work place flexibility is defined as a formal or informal agreement between an employer and employee to provide individual job control over flexibility in timing, location, amount, or continuity in concert with non-work needs”	Kossek and Thompson (2016)

Researcher Proposed Model



Research Methodology

Technology Acceptance Model (TAM) is considered for the research study as a research model. Remote Work (RW), Increased Communication (SE), Work Extension (WE), Permeability (PER) and Flexibility (FLE), Work-Life balance (WLB) are the constructs being

used in the study. In order to retrieve data economically from the required sample, survey research was considered the research strategy (Saunders et. al, 2003). Questionnaires were formed to acquire the input data from the sample size. The framed questionnaire was sent online to the respondents. The objective and purpose of the data collection were explained to the respondents (Oppenheim, 1996). The convenience sampling technique is preferred over other sampling techniques in which “the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contact with others” (Bryman, 2008). Out of the 266 questionnaires distributed, 213 responded. After neglecting the 12 incomplete or invalid responses, the sample size was determined to be 201. The geographic location was considered within Chennai as the research is basically from the same city.

Research Objective

1. To find out the determinants of Work Life Balance
2. To find the relationship between the independent variables and Dependent variables.
3. To find out the difference between demographic factors and perception on Work life balance constructs.

Research Hypothesis

1. There is no significant relationship between the independent variables and dependent variable.
2. There is no significant impact of the independent variables over the dependent variable.
3. There is no significant difference between the demographic factors and determinants of Work life balance.

Analysis and Interpretations

Table 7.1 Respondent’s Demographic Profile

S. No	Demography	Category	Frequency	Percentage (%)
	Variable			
1	Gender	Male	133	65
		Female	71	35
2	Age	19-25	97	47
		26-30	48	24
		31-40	27	13
		40-50	23	12
		50 and above	9	4
3	Qualification	Diploma	27	13
		UG	109	54
		PG	58	28
		Others	10	5
4	Work Experience	1-5 years	114	56
		6-10 years	43	21
		11-13 years	22	11
		14-16 years	17	8
		16 + years	8	4
5	Designation Status	Top-level management	23	11
		Middle-level management	106	52
		Low-level management	75	37

From the table 7.1, out of the total respondents, 65% of respondents are male and 35% are female. Moreover, the highest number of respondents falls under the age group of 19-25, which comes to 47%. The next highest respondent category comes under the age group of 26-30, comprising of 24%. Respondents of the age group from 31-40 comprises of 13% and 4% is comprised in 50 and above category. When comes to the educational qualifications, 54% holds a UG degree and 28% have acquired a PG degree, diploma holders to 13% and others to 5% respectively. 21% of respondents have work experience from 6-10 years with 56% falling under 1-5 years category, 11% in 11-13 years, 8% in 14-16 years and 4% in 16+ year's category. It is seen that the designation status has 52% of Middle-level management, 37% of low-level management and 11% of top-level management.

Table 7.2 Loading Items

	ITEMS	LOADING	CR	AVE	MSV	MaxR(H)
WORK_LIFE_BALANCE	WOLB1	0.710	0.785	0.549	0.457	0.786
	WOLB2	0.723				
	WOLB3	0.747				
REMOTE_WORK	REW1	0.703	0.764	0.520	0.367	0.777
	REW2	0.712				
	REW3	0.765				
INCREASED_COMMUNICATION	INCO1	0.736	0.768	0.526	0.367	0.774
	INCO2	0.754				
	INCO3	0.709				
INCREASED_WORKING_HOURS	IWH1	0.769	0.718	0.516	0.348	0.756
	IWH2	0.717				
	IWH3	0.726				
FLEXIBILITY	FLEX1	0.733	0.710	0.508	0.032	1.255
	FLEX2	0.747				
	FLEX3	0.765				
	FLEX4	0.716				
PERMEABILITY	PERM1	0.729	0.705	0.513	0.032	0.709
	PERM2	0.757				
	PERM3	0.701				

From the above table, it is identified that all AVE values are >0.5. Hence it can be interpreted that there is relationship between all the constructs. To assess the reliability of the constructs used in the research study, Cronbach's alpha is measured. In general values of Cronbach's alpha ranges from 0 and 1. It is seen that the values of Cronbach's alpha is above 0.7 thus proving the constructs are reliable.

Discriminant Analysis

Table 7.3.1 Fornel Lackner Criterion

WORK_LIFE_BALANCE	REMOTE_WORK	INCREASED_COMMUNICATION	INCREASED_WORKING_HOURS	FLEXIBILITY	PERMEABILITY
0.741					
0.591	0.721				
0.591	0.606	0.725			
0.571	0.458	0.501	0.684		
0.180	0.102	0.159	0.045	0.713	
0.676	0.542	0.379	0.590	0.083	0.681

From the above table, it is seen that the square root of Average variance extracted is greater than the correlation of the latent variables, thus proving that there is no multicollinearity issues.

T-TEST

Table 7.4.1 Difference between opinion of Male and Female employees and perception on Work Life Balance constructs

	Gender	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)
REMOTE_WORK	Male	133	11.1955	2.54790	.22093	0.141
	Female	71	10.6620	2.28000	.27059	
INCREASED_COMMUNICATION	Male	133	10.3459	2.70534	.23458	0.092
	Female	71	9.6901	2.50480	.29727	
INCREASED_WORKING_HOURS	Male	133	10.5414	2.70104	.23421	0.832
	Female	71	10.4648	1.88096	.22323	
PERMEABILITY	Male	133	8.2632	2.35132	.20389	0.032
	Female	71	9.0000	2.25515	.26764	
FLEXIBILITY	Male	133	8.2632	2.35132	.20389	0.029
	Female	71	9.0000	2.25515	.26764	
WORK_LIFE_BALANCE	Male	133	11.2256	2.58965	.22455	0.616
	Female	71	11.3944	1.57189	.18655	

For the given data, the significant value for the constructs Permeability (PER) (0.032) and Flexibility (FLE) (0.029) is < 0.05. Hence there we can interpret that male and female has different opinions in permeability and flexibility of work life. The opinion remains same between male and female for the constructs like (Remote Work (RW), Increased Communication (SE), Work Extension (WE)). Since these significant values are > 0.05.

Correlation Analysis

Table 7.5.1 Correlation between Independent Variables of the Proposed Model

	REMO TE WORK	INCREASED COMMUNICATIO N	INCREASE D WORKING HOURS	PERMEABILIT Y	FLEXIBILIT Y	WORK LIFE BALANC E
REMOTE WORK	1					
INCREASED COMMUNICATIO N	0.471	1				
INCREASED WORKING HOURS	0.314	0.399	1			
PERMEABILITY	0.029	0.141	0.01	1		
FLEXIBILITY	0.029	0.141*	0.01	0.31	1	
WORK LIFE BALANCE	0.463	0.460	0.417	0.144	0.144	1

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

From the above table, it is determined that the constructs Remote Work (RW) and Increased communication (SE) have high correlation and constructs like Work extension (WE) and Permeability (PER) have low correlation. Constructs like Work life balance (WLB) and Permeability (PER) has a considerably moderate correlation.

Regression Analysis

Table 7.6.1 Coefficients showing relationship between External Variables (Remote Work (RW), Increased Communication (SE), Work Extension (WE), Permeability (PER) and Flexibility (FLE)) as predictor variables and Work life Balance (WLB) as the dependent.

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.293	.858		3.836	.000		
	REMOTE WORK	.262	.061	.282	4.288	.000	.758	1.319
	INCREASED COMMUNICATION	.187	.059	.216	3.139	.002	.692	1.445
	INCREASED WORKING HOURS	.225	.059	.241	3.800	.000	.819	1.221
	FLEXIBILITY	.100	.057	.103	1.767	.079	.976	1.024

a. Dependent Variable: WORK_LIFE_BALANCE

From the above table it is clearly understood that the relation between external variables with work life balance as a dependent variable, Remote work (t=4.288, 0.000), Increased

communication ($t=3.139, 0.002$), Work extension ($t=3.800, 0.000$) are found to be significantly associated. Whereas Flexibility ($t=1.767, 0.079$) was the only construct found to be in significant. Therefore the Work life balance is greatly influenced by Remote work and Work extension and least influenced by Flexibility.

Structural Equation Modeling

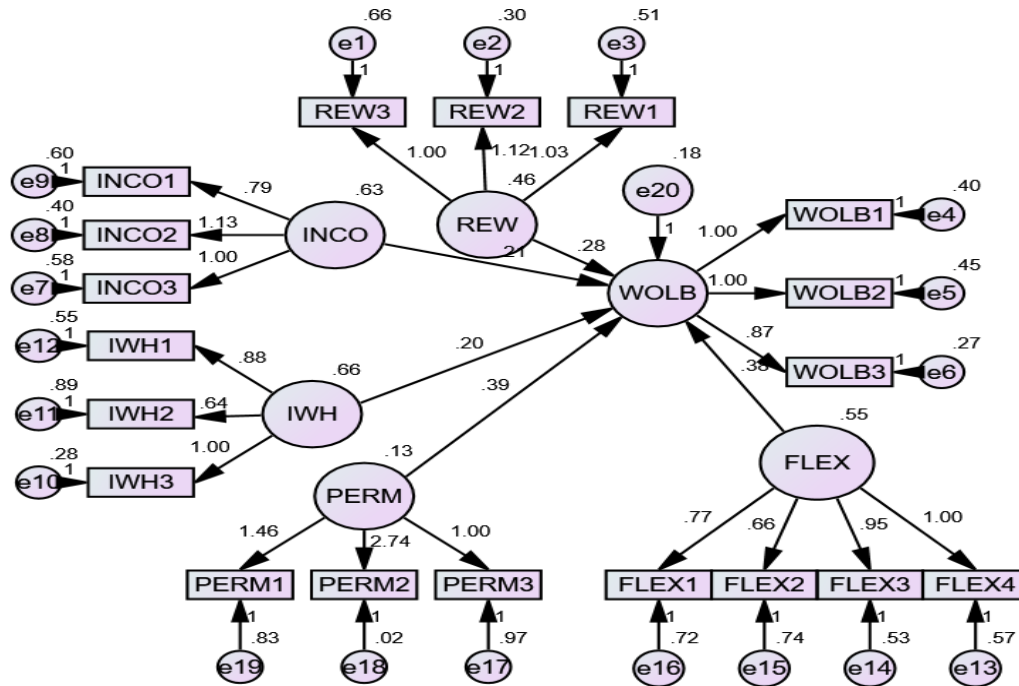


Figure 7.1

Conclusion

The study was actually carried out to measure the impact of factors on work life balance due to technology transformation with respect to information technology employees. The constructs taken for the study includes Remote Work (RW), Increased Communication (SE), Work Extension (WE), Permeability (PER) and Flexibility (FLE) are the independent Variables and Work Life balance (WLB) as the dependent variable. The study focused on the impact of the above mentioned constructs over the work-life balance of Information Technology employees. The study revealed that the independent variables such as Work Extension (WE), Remote Work (RW) and Increased Communication (SE) had significant impact on the work-life balance (WLB) of IT employees except Permeability (PER) and Flexibility (FLE). It reveals that male and female has different opinions in permeability and flexibility of work life. The opinion remains same between male and female for the constructs like Remote Work (RW), Increased Communication (SE), Work Extension (WE). It is also determined that the constructs Remote Work (RW)

and Increased communication (SE) have high correlation and constructs like Work extension (WE) and Permeability (PER) have low correlation. From the Regression analysis performed, it is identified that the Work life balance of IT employees is greatly influenced by Remote work and Work extension and least influenced by Flexibility.

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