Prevalence and Patterns of Work-Life Balance among Women in the Information Technology Sector of Kerala, India

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[Abstract] Women in the information technology (IT) field are a group that faces problems with maintaining Work-Life Balance (WLB), primarily because of the nature of the industry's work. This study aims to examine the prevalence of WLB among the women workforce in the information technology (IT) sector of Kerala, a state in India; the study examines the patterns of the WLB in terms of its size and a few important socio-demographic factors. The study is based on a cross-sectional data set collected from 360 women employees employed in the IT sector of Kerala. The study revealed that, *albeit* moderately, WLB prevails among the women employees in the IT sector of Kerala. The strength of their WLB was not different across their marital status, type of families in which they reside, age categories, and the designation level of the employees. However, the WLB of the women employees having children was significantly lower than that of the employees having no children. The WLB of the women employees whose spouses were in business was significantly lower than that of the women employees whose spouses were doing other private and government jobs. Childcare responsibility and insufficient support from businessmen who were also husbands tended to adversely affect the WLB of women in the IT sector of Kerala.

[Keywords] information technology, Wlb index, work-life balance, women workforce

Introduction

Work-life balance (WLB) refers to the extent to which an employee can meet the competing demands of the two domains of life: “work domain” and “personal domain” (health, family, societal relationships and commitments, friends, leisure, etc.) by reducing the conflicts and interferences and by enhancing enrichment and facilitation between the domains. When the working women fail to meet the demands of both domains sufficiently, it causes imbalance, ultimately leaving certain requirements or expectations of domains unattended; this calls for conflicts or inter-role interferences. Certain roles played by the employees may create over-load that is mostly unsolicited and, thus, difficult to handle. When two roles are incompatible or conflicting with each other, role conflicts arise (Gracious & Fouziya, 2018). This would lead to an imbalance in life that hampers the stability in an overall approach and performance towards each and everything that is confronted. When one domain demands more and is unattended to, then this gives rise to stress and dissatisfaction and ultimately ends up as burnout and loss of good mental and physical health. Giving due attention to work and non-work domains of life fortify the balance of the domains of employees.

The Information technology (IT) sector is one of the most sought out sectors where women go for employment. Huge employment opportunities exist in this sector. The academic records and interest in the field motivate women to seek the IT stream, but very often it is seen that they struggle to pursue it profoundly. The most significant reason for this is that the balance is hampered by the work culture of the sector. Women in the workforce of the IT sector face trouble with attaining this balance mainly because of the nature of work the industry proclaims.

The environment in the IT sector is generally confronted with instability and uncertainty in its tasks that result in long working hours (Scholarios & Marks, 2004). The culture of the IT industry is such that there exists a pressure to learn and to unlearn in order to incorporate the rapidly changing technologies quickly to keep pace with the current requirement and to preserve the skillset from being obsolete. This

ever-increasing demand for frequently reskilling in the form of training requires a huge sacrifice of personal time, coming at the cost of personal commitments (Armstrong et al., 2007). When considering the status of women working in the IT sector, it can be inferred that more research is essential into this area, as previous studies have brought to light that this category lacks work-life balance the most (Kumar & Devi, 2015). Also, if the employee is married (Kapoor et al., 1999) and has children (Pareekh, 1998), then it seems to worsen the situation. This ultimately cultivates turnover intention (Gracious & Fouziya, 2018) or creates a stressed-out situation that ends up with a handful of problems created by facing work-life imbalance. Women working in the IT sector experience a very high degree of role overload and role conflict, as they are stretched to tackle home chores and office tasks that are never trivial. An overwhelming majority of the IT women fear losing or leaving the job they are in, as they confess that the biggest worry they have is in terms of the Herculean task of balancing their professional and personal lives.

The above discussion brings to light that WLB is a very complex area that has to be addressed with the utmost significance. When it comes to women employees, WLB is even more intricate as they tend to deal with complex multiple roles in different facets of life that are, at times, unique and irreplaceable. When these women employees belong to the IT sector, then the situation deepens because of the peculiar work culture of the industry. Moreover, Kerala, a state in India, being a major IT destination that already holds a good proportion of women and is ready to accommodate more, has been impacted by the general national scenario of losing these equipped hands in the later stages of employment. Reading all these issues together, it is reasonably clear that the WLB of women in the IT sector in Kerala is an area that calls for attention for the researcher to rightly pitch the study on. Therefore, this study attempts to address this issue by examining the prevalence and patterns of WLB of women in the IT sector in Kerala, India.

This study is organized in five sections: the first section is the introduction about the focal point of the study; the second section discusses the data used and the methods of research adopted; the third section explains the prevalence of WLB among the IT women in Kerala; the fourth section discusses the patterns identified in terms of socio- demographic factors, and the fifth speaks about the conclusion of the study.

Materials and Methods

Stratified random sampling was adopted for the collection of data from the respondents. Three districts of Kerala(Trivandrum, Ernakulam, and Kozhikode) were chosen for study, as these are portrayed by the Government of Kerala as Hub Districts; from them, 360 women employees were chosen [the sample size was determined based on Cochran's (1977) formula] to participate in the study. Data was collected from the respondents using a questionnaire. An eight-item scale of WLB, which was an adapted version of the fifteen-item scale formulated by Hayman (2005), was used to measure the degree of WLB experienced by the respondents. The respondents were asked to use a five-point Likert scale labelled as "Strongly Agree," "Agree," "Neither Agree nor Disagree," "Disagree." or "Strongly Disagree" and coded as 0, 1, 2, 3, and 4. This paper is a part of another major study conducted by the researchers in the realm of women employees in IT sector; the reliability and validity of the WLB construct was established using confirmatory factor analysis (CFA). The data has been analyzed using descriptive statistical techniques, such as frequency tables, charts, mean, standard deviation, and the inferential statistical tools such as the chi-square test, t-tests, and ANOVA.

Prevalence of WLB

The primary intention of the study is to examine the prevalence of WLB among women in the IT sector of Kerala. Table 1 (see the Appendix) displays the descriptive statistics of the WLB scale items and the associated one-sample t-test results. It can be seen from the table that around 48% of the respondents perceived the existence of WLB in their current life, while 26% perceived the non-existence of WLB in their current life. One-sample t-test results reported in the table indicate that the mean score of the WLB construct and six out of its eight indicators were significantly greater than 2, which was the mean value of the neutral position in the scale. The sample mean of 2.32 (SD = 0.90) indicates that the women IT employees in Kerala, on average, perceived a moderate work-life balance. The test results for the six out of

the eight indicators of the WLB of the employees also gave the same conclusion, while the mean value of two items was not significantly different from the neutral position (see Table 1 in the Appendix). Overall, it can be inferred from the foregoing analysis results that, though moderately, work-life balance prevails among the women employees in the IT sector of Kerala.

Patterns of WLB

After confirming the prevalence of WLB among women in the IT sector of Kerala in the previous section, we describe the patterns of WLB in the study units in this section. The patterns of the WLB are examined in terms of its size-wise distribution and across certain important socio-demographic factors.

Size-wise Distribution Pattern of the WLB Index

The size-wise distribution of the WLB index shown in Table 2 indicates that the WLB index of two-thirds of the respondents was greater than 50% and that of approximately 27% of the respondents ranged between 25% to 50%, and the WLB index of almost the same percentage of the respondents ranged between 75% to 100%. Only a negligible proportion of respondents experienced WLB below 25%. A chi-square test of goodness-of-fit revealed that the percentage of the women employees were not equally distributed across the four size-wise classes of the WLB index in the IT sector of Kerala, χ^2 (3) = 85.98, p < .001.

The WLB index was constructed for each respondent by taking the percentage of the weighted sum of the responses of the respondents to the eight indicators of the WLB to its maximum possible value, which is 32 (i.e.,4x8) in this study.

Table 2
The Pattern of Distribution of the WBL Index of the Women Employees in the IT Sector of Kerala

Sl. No.	WLB Index (%)	Frequency	Percentage	Cumulative Percentage	Chi-square Test Results
1	0 - 25	22	6.1	6.1	
2	25 - 50	98	27.2	33.3	$\chi^2 = 85.978$
3	50 - 75	145	40.3	73.6	*df.* = 3
4	75 - 100	95	26.4	100.0	$p < .001$
	Total	360	100		

Source: Primary Survey Data

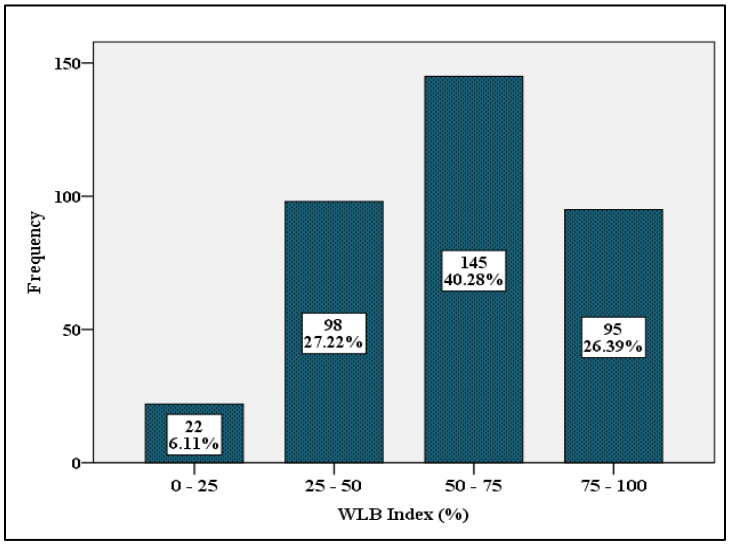

Figure 1. Size-wise Distribution Pattern of the WLB Index

The Pattern of WLB across Selected Socio-Demographic Variables

The pattern of WLB across a few important socio-demographic variables *viz.,* marital status, spouse's occupation, type of family, child-rearing, age, and level of employment is presented in this section.

Table 3
WLB across the Marital Status of the Women in IT Sector of Kerala

Sl. No.	Marital Status	Mean WLB Index (%)	SD	Skewness	Kurtosis	N	One- Way ANOVA Results
1	Unmarried	58.29	22.50	0.05	-0.76	150	F (2, 357) = 0.705 p = .495
2	Married	58.02	22.44	-0.23	-0.75	207	Test of Homogeneity of Variances
3	Divorced	42.71	28.87	-1.73	--	3	*Levene F Statistic* (2,357) = 1.26, p = .882
	Total	58.00	22.48	-0.12	-0.74	360	

Source: Primary Survey Data

The average WLB index of the respondents across their marital status is presented in Table 3. The results obtained from the sample show that the WLB index of the unmarried women employees was marginally better than that of the married women employees, which, in turn, was better than the divorced women employees. However, the one-way ANOVA results reported in the table reveal that there was no statistically significant difference in the WLB of the women employees across their marital status in the IT sector of Kerala, F (2, 357) = 0.705, p = .495. The results suggest that the marital status did not affect the work-life balance of the women employees in the IT sector of Kerala. There were 207 married women employees in the sample (57.5% of the total respondents in the sample), and the spouses of 205 (99%) of them were employed.

A comparative picture of the WLB of the women employees whose spouses work in different sectors is given in Table 4. The one-way ANOVA results presented in the table reveal that there is a statistically significant difference in the WLB of the women employees across the occupation of their spouses, F (3, 201) = 5.73, p = .001. The *post hoc* comparisons using a Tukey HSD test indicated that the mean WLB score of the women employees who were the wives of the businessmen was significantly less than the wives of government employees and private employees. However, there was no significant difference in the WLB of the wives of the other occupational categories (see Table 5).

Table 4
WLB across the Occupation of the Spouses of Women in IT Sector in Kerala

Sl. No.	Spouse's Occupation	Mean WLB Index (%)	SD	Skewness	Kurtosis	N	One- Way ANOVA Results
1	Government Servant	67.33	28.69	0.03	-1.65	11	F (3, 201) = 5.727 p = .001
2	Private Sector	60.74	21.93	-0.46	-0.58	142	
3	Business	45.83	17.21	0.26	-0.89	39	Test of Homogeneity of Variances
4	Others	53.37	24.32	-1.01	-0.35	13	*Levene F Statistic* (3,201) = 1.793, p = .150
	Total	57.79	22.41	-0.21	-0.75	205	

Source: Primary Survey Data

Table 5
Multiple Comparisons of Occupations of Spouses

Dependent Variable: Work-life Balance Tukey HSD						
(I) Spouse's Occupation	(J) Spouse's Occupation	Mean Difference (I-J)	Std. Error	P - value	95% Confidence Interval	
					Lower Bound	Upper Bound
Government Servant	Private sector	6.59	6.781	.766	-10.98	24.16
	Business	21.50*	7.397	.021	2.33	40.66
	Others	13.96	8.877	.396	-9.03	36.96
Private sector	Government Servant	-6.59	6.781	.766	-24.16	10.98
	Business	14.91*	3.917	.001	4.76	25.05
	Others	7.37	6.279	.644	-8.89	23.64
Business	Government Servant	-21.50*	7.397	.021	-40.66	-2.33
	Private sector	-14.91*	3.917	.001	-25.05	-4.76
	Others	-7.53	6.939	.699	-25.51	10.45
Others	Government Servant	-13.96	8.877	.396	-36.96	9.03
	Private sector	-7.37	6.279	.644	-23.64	8.89
	Business	7.53	6.939	.699	-10.45	25.51

**. The mean difference is significant at the 0.05 level.*

Table 6
Work-Life Balance across the Type of Family of the Women Employees in the IT Sector of Kerala

Sl. No.	Type of Family	Mean WLB Index (%)	S.D.	Skewness	Kurtosis	N	Independent Samples t-test Results
1	Joint Family	57.83	19.51	-0.04	-0.76	93	t = -0.095
2	Nuclear Family	58.06	23.46	-0.13	-0.79	267	df = 191.23
	Total	58.00	22.48	-0.12	-0.74	360	p = .925
Levene's Test for Equality of Variances		F (1,358) = 6.061, p= .014					

Source: Primary Survey Data

The descriptive summary statistics of the WLB index of the respondents from the joint family and nuclear family given in Table 6 shows that the WLB of the employees from these two types of families were very close to each other. An independent sample t-test was performed for comparing the WLB index of the women employees from nuclear families and joint families. Levene's test indicated that the equality of variances assumption had been violated: F (1, 358) = 6.06, p = .014. Therefore, an independent sample t statistic not assuming homogeneity of variance (Welch test) was used for the analysis. The test results indicated that the WLB of the women employees belonging to joint families was not significantly different from that of the women employees belonging to the nuclear families in the IT sector of Kerala: t (191.23) = -0.095, p = .925. The results suggest that work-life balance was not affected by the type of family of the women in the IT sector of Kerala.

Table 7
The WLB of the Women Employees in the IT Sector in Kerala with and Without Children

Sl. No.	Have Children?	Mean WLB Index (%)	S.D.	Skewness	Kurtosis	N	Independent Samples t-test Results
1	No	59.91	22.19	-0.05	-0.61	228	$t = 2.214$
2	Yes	54.71	22.68	-0.22	-1.08	132	$df = 358$
	Total	58.00	22.48	-0.12	-0.74	360	$p = .034$
Levene's Test for Equality of Variances		F (1,358) = 2.204, p= .139					

Source: Primary Survey Data

Table 7 presents a comparison of the descriptive statistics of the WLB index of the respondents having children with the respondents having no children. It can be noticed from the table that the mean WLB index value of the respondents having no children was greater than that of the respondents having children by 5.2 percentage points. The independent sample t-test results confirmed the sample results that the WLB index of the employees having no children was significantly different from that of the employees having children: t (358) = 2.21, p = .034. These results say that having children had an adverse impact on the work-life balance of women in the IT sector of Kerala.

Table 8
WLB across the Different Age Group of the Women Employees in the IT Sector in Kerala

Sl. No.	Age Group (Years)	Mean WLB Index (%)	SD	Skewness	Kurtosis	N	One- Way ANOVA Results
1	Up to 25	58.32	22.84	-0.10	-0.72	127	F (3, 356) = 0.076
2	26 - 30	58.36	21.49	0.23	-0.64	132	p = .973
3	31 - 35	56.89	24.17	-0.56	-0.99	68	Test of Homogeneity of Variances
4	36 & Above	57.67	22.35	-0.26	-0.81	33	*Levene F Statistic* (3, 356) = 1.007
	Total	58.00	22.48	-0.12	-0.74	360	p = .390

Source: Primary Survey Data

The WLB index of the respondents falling into different age categories are presented in Table 8. It shows that the WLB of the respondents belonging to different age categories was almost similar. The one-way ANOVA results reported in the table also reveal that there was no statistically significant difference in the WLB of the women employees belonging to different age groups in the IT sector of Kerala: F (4, 356) = 0.076, p = .973. It can be inferred from the results that the age of the respondents did not affect the work-life balance of the women in the IT sector of Kerala.

Table 9
WLB across the Level of Employment of the Women Employees in the IT Sector of Kerala

Sl. No.	Designation Level of Employment	Mean WLB Index (%)	SD	Skewness	Kurtosis	N	One- Way ANOVA Results
1	Upper Level	63.21	24.94	-0.57	-0.33	35	F (2, 357) = 1.099 p = .334
2	Middle Level	57.59	22.13	-0.10	-0.73	289	Test of Homogeneity of Variances
3	Lower Level	56.25	22.77	0.14	-0.80	36	*Levene F Statistic* (2,357) = 0.158, p = .854
	Total	58.00	22.48	-0.12	-0.74	360	

Source: Primary Survey Data

The WLB index of the respondents across different levels of employment shown in Table 9 indicate that the WLB of the upper-level employees was higher than that of the middle-level employees, which, in turn, was greater than that of the lower-level employees included in the sample. Nonetheless, the ANOVA results indicate that there was no statistically significant difference in the WLB of the women employees across the designation levels of employment in the IT sector of Kerala: F (2, 357) = 1.10, p = .334. The results say that the designation level of an employee in the organization did not influence the work-life balance of the women in the IT sector of Kerala.

Conclusion

This study intended to address two important research questions, *viz*., whether the women employees in the information technology sector of Kerala experience work-life balance and if so, what is its magnitude. Furthermore, the study aimed to examine the pattern of WLB in terms of its magnitude and across some important socio-demographic factors.

The analysis revealed the prevalence of the work-life balance among the women employees in the IT sector in Kerala. However, the magnitude of the WLB was found to be moderate. Nearly half of the total respondents in the sample perceived the prevalence of the WLB, while only around one-fourth of them perceived the non-existence of it. The size-wise distribution of the WLB index indicated that WLB index of two-thirds of the respondents was greater than 50%. The analysis of the patterns of WLB across the socio-demographic factors revealed that the strength of work-life balance of the women employees in the IT sector of Kerala was not different across their marital status, type of families in which they reside, age categories, or the designation level of the employees. However, the WLB of the women employees having children was significantly lower than the employees having no children. Taking care of the children was found to adversely affect the work-life balance of the women employees in the IT sector of Kerala.

The occupation of the spouse of the employee also had a significant effect on their WLB. The work-life balance of the women employees whose spouses were in business was significantly lower than that of the women employees whose spouses were doing other private or government jobs. This brings to light how important the support of a spouse is in enhancing the balance attainment of women employees, along with organizational resources.

Based on the analysis, it can be concluded that women employees in the IT sector in Kerala experience WLB only moderately. The sector has not been able to cushion the employees reasonably well in the context of WLB. Indications of the prevalence of imbalance among a not-very-insignificant portion of the sample calls for the attention of the industry. Considering the negative effects of imbalance, caution must be taken to track the perception and experience of the employees to facilitate a hassle-free and confident growth of this precious resource, which is inevitable for the steady progress of the industry.

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