

## Incidence and Covariates of Job Satisfaction of Women in the Information Technology Sector of Kerala, India

**Tina Blossom Francis**

*Sacred Hearts College, Kochi, India*

*tinablossomfrancis@shcollege.ac.in*

**Rajesh P**

*Government Engineering College, Thrissur, India*

*rajesh@gectcr.ac.in*

**Ebby Joseph Idiculla**

*BAM College, Pathanamthitta, India*

*josephebby@gmail.com*

**[Abstract]** This study examined the incidence and covariates of job satisfaction of women in Kerala's information technology (IT) sector. Data for the study was collected from 360 women employees from Kerala's IT sector using the stratified random sampling technique. The descriptive statistics and one-sample t-tests revealed the existence of job satisfaction, albeit moderately, among the women employees in Kerala's IT sector. Additionally, the study attempted to identify the important covariates of job satisfaction using multiple linear regression, for which ten factors were tested as the covariates, keeping job satisfaction of the employees as the response variable. Results brought to light that except for the experience of the employees, the age of the employees, policies of the companies regarding work-life balance (WLB) of the employees, the support from work-domain, work-life balance of the employees, marital status, having children or not, type of family of the employees, and the level of designation of the employees were recognized as the significant covariates of the job satisfaction of the women employees in Kerala's IT sector.

**[Keywords]** information technology, women, job satisfaction, turnover intention

### Introduction

Job satisfaction has been the most looked upon as a term concerning employment. It is a feeling of self-motivation that is inculcated through an experience of contentment with the job. A satisfied employee has a better desire to stay with the organization because of the commitment he/she has developed towards the organization, which simultaneously reduces attrition (Amos & Weathington, 2008; Henning-Thurau, 2004; Simon, 1991). More clearly, lack of job satisfaction can lead to attrition. Attrition (employee turnover) or turnover intention is a phenomenon related to the sudden drain of human resources from an organization. Researchers have identified employees' turnover intention to be expensive, disruptive, and detrimental to productivity. The after-effects of employee turnover can be nothing better than the loss of talent and knowledge, reduced revenue, increased cost of new talent acquisition initiatives, etc. (Cascia, 1991).

When this is in the context of women employees, they seem to struggle more with job satisfaction, leading to turnover intention, than do men. Unlike men, women end up with stress and burnout that leads to less job satisfaction when prioritizing career and work at the cost of ignoring family demands (Kanwar, Singh, & Kodwani, 2009). This is mainly because women are expected to take care of kids and dependents, irrespective of whether they have a career to follow or a job to do. This scenario becomes even more complicated when the women belong to the IT sector because of the job's nature, which is very demanding concerning time and effort. Researchers have identified turnover intention to be one of the most severe IT sector problems ever since the beginning (Von & Miller, 2011; Kim, 2005; Zhang & Jones, 2011). Studies bring to light that the IT sector still faces it despite continuous attempts to curb it. This increasing sense of turnover intention is the result of dissatisfaction of employees. Dissatisfaction in terms of pay, work culture,

job clarity, recognition, a manager's approach, inability to balance work and life, etc., are the common triggers for arousing an intention to leave a job. Thus, it is clear that job satisfaction is a very significant occurrence in the context of women in the IT sector. Kerala, a state with a considerable proportion of IT companies spread across its various IT hubs, is a major IT destination of India. The state foresees prospective opportunities in terms of employment and growth in this sector, expecting to incorporate more women resources hand in hand with men. Considering this background, the researchers attempt to examine the prevalence of job satisfaction and also to highlight the factors which influence job satisfaction of women in Kerala's IT sector. This paper is presented in five sections, the first being the introduction given above; Section Two describes the data and methods followed; the incidence of job satisfaction is shown in the next section; Section Four examines the covariates of job satisfaction, and the fifth section presents the conclusion with discussion.

### Materials and Methods

Data for the study were collected from 360 women employees [the sample size was determined based on Cochran's (1977) formula] from the IT sector of Kerala using the stratified random sampling technique. Three hub districts of Kerala (Trivandrum, Kochi, and Kozhikode) were chosen for collecting the samples. A questionnaire was developed incorporating five constructs by adopting existing validated measurement scales. The response of the respondents was obtained on a Likert scale with five points coded from 1 to 5. This study is a part of a major study undertaken by the researchers. The construct's reliability and validity have been established by conducting confirmatory factor analysis (CFA) after exploring the constructs through exploratory factor analysis (EFA). Descriptive statistics, one-sample t-tests, and multiple linear regression approaches are used to analyze data.

### Incidence of Job Satisfaction

An eight-item scale, which was an adapted version of a scale created by Macdonald and Macintyre (1997) was applied for studying the job satisfaction of IT women in Kerala. The summary statistics and one-sample t-test results of the job satisfaction construct and its eight items are presented in Table 1. The t-test results indicated that the population mean-score for the overall job satisfaction construct was significantly different from 3,  $t(359) = 13.01, p < .001$ . It was true for all the eight indicators of this construct. It is apparent from the table that the sample means of the job satisfaction construct and all its indicators were greater than 3. These results indicate the prevalence of job satisfaction among IT women in Kerala.

*Table 1  
Description of the Job Satisfaction of Women IT Employees of Kerala (Test value = 3)*

Sl. No.	Indicators of Job Satisfaction	Descriptive Statistics		One-Sample t-test Statistics*		
		N	Arithmetic Mean	S.D.	t	df
1	I feel nice to work in this company.	360	3.78	0.92	16.08	359
2	I feel great about my job.	360	3.72	0.99	13.85	359
3	I get along with my supervisors.	360	3.63	0.95	12.62	359
4	I am recognized for a job well done.	360	3.50	1.03	9.17	359
5	My entire skills and talents are utilized at work.	360	3.44	1.08	7.71	359
6	I believe management is concerned about me.	360	3.41	1.04	7.42	359
7	My remuneration is good.	360	3.40	1.02	7.38	359
8	On the whole, I think work is great for my health.	360	3.35	1.04	6.42	359
Overall Job Satisfaction		360	3.53	0.77	13.01	359
						<.001

### The Covariates of the Job Satisfaction of the IT Employees

The covariates of job satisfaction (JS) of the women employees of Kerala's IT sector have been explored by estimating the following multiple linear regression model:

$$Y = \beta_0 + \sum_{i=1}^6 \beta_i X_i + \sum_{i=1}^5 \gamma_i D_i + \varepsilon$$

Table 2 describes the details of the variables included in the regression equation. Table 3 summarizes the ordinary least squares method (OLS)-based regression estimation results. Model adequacy tests were performed to determine the validity of the classical linear regression assumptions. The model specification was found adequate as per Ramsey's RESET, there was no significant non-normality in the distribution of the error terms, and there was no evidence of significant multicollinearity between the regressors as indicated by the VIF.

However, White's test revealed the heteroskedasticity problem, LM = 139.32, p < .001. The significance testing of the estimated regression coefficients was conducted using heteroskedasticity-robust standard errors in this context. The estimated regression results can be trusted, for they passed critical model adequacy tests with necessary adjustments. The model, as a whole, was statistically significant, F(11, 348) = 25.56, p < .001. The coefficient of determination ( $R^2 = .396$ ) was statistically significant, indicating a moderate fit of the data to the model.

*Table 2. Variable Construction*

Sl. No.	Variables	Variable Description
1	Y (Job Satisfaction)	It is the dependent variable, being the "Job Satisfaction" score calculated from eight Likert scale items expressing various dimensions of job satisfaction among women employees in Kerala's information technology sector [Cronbach's Alpha ( $\alpha$ ) = .897].
2	X <sub>1</sub> (Age)	The female IT employee's age (in years).
3	X <sub>2</sub> (Experience)	The length of the employee's professional experience (in years).
4	X <sub>3</sub> (Job Characteristics)	A construct made up of six Likert scale items that measure the job characteristics of IT employees [Cronbach's Alpha ( $\alpha$ ) = .907]. Autonomy of Job, Fairness of Reward, Manageable Workload, Significance of Task, Task Clarity, and Feedback from work are the components of job characteristics.
5	X <sub>4</sub> (Work-life Balance Policies)	A construct made up of seven items that measure various facets of the organization's WLB policies [Cronbach's Alpha ( $\alpha$ ) = .919].
6	X <sub>5</sub> (Work Domain Support)	The composite of seven items measuring the level of support from the domain of work enjoyed by employees [Cronbach's Alpha ( $\alpha$ ) = .902]. Organizational Support, Superior Support, and Peer Support are the components of Work Domain Support.
7	X <sub>6</sub> (Work-life Balance)	A WLB score, computed from eight items expressing different facets of employees' WLB [Cronbach's Alpha ( $\alpha$ ) = .935].
8	D <sub>1</sub> (Marital Status)	A dummy variable that is equal to 1 if the respondent is married and 0 otherwise.
9	D <sub>2</sub> (Children)	A dichotomous variable that is equal to 1 if the respondents have children and 0 if they don't.
10	D <sub>3</sub> (Family Type)	An indicator variable that assumes a value of 1 if the respondents come from a nuclear family and 0 if they don't.
11	D <sub>4</sub> (Middle Level)	A dichotomous variable that is equal to 1 if the respondent is a middle-level manager and 0 otherwise.
12	D <sub>5</sub> (Higher Level)	An indicator variable which is equal to 1 if the respondents hold a higher-level position in the organization and 0 if they don't.

Table 3 summarizes the estimated regression results. The findings indicate that five of the six quantitative variables and all four qualitative variables influenced the job satisfaction of women employees in Kerala's IT sector. However, the duration of the employee's professional experience was the only predictor variable included in the model that had no significant influence on job satisfaction. More precisely, age, the "job characteristics" factor, the "work-life balance policies" factor, the "work-domain support" construct, and the "work-life balance" construct positively influenced the job satisfaction of women employees in Kerala's IT sector; however, the length of professional experience had no such effect.

The findings indicate that, with other variables remaining constant, age, supportive characteristics of job, favorable policies of work-life balance, increased support from work domain, and increased WLB contribute to increased job satisfaction among women employees in Kerala's IT sector. The negative coefficient for marital status, which was statistically significant, indicates that married employees had lower job satisfaction on average than unmarried employees, *ceteris paribus*. Further results indicate that IT employees with children reported higher job satisfaction than those without children.

The negative coefficient for the dummy variable "family type," which was statistically significant, implies that other variables being equal, job satisfaction was significantly lower for employees from nuclear families than for employees from joint families. Finally, the statistically significant positive coefficients for the final two dummy variables in the model signify that the designation level of employees had a significant effect on their job satisfaction, with low-level employees reporting significantly lower job satisfaction than middle- and upper-level female employees in Kerala's IT sector, *ceteris paribus*. Based on these findings, we conclude that all nine of the ten predictor variables, except "experience," were significant covariates of job satisfaction for women in Kerala's IT sector.

*Table 3. Multiple Linear Regression Results Job Satisfaction of the Women*

Sl. No.	Predictors	Unstandardized Coefficients		Standardized Coefficients Beta	<i>t</i> - ratio	<i>p</i> -value	Collinearit y Statistics VIF	Model Summary Statistics
		B	Standard Error*					
1	(Constant)	.594	0.331	--	1.79	.074	--	
2	X <sub>1</sub> (Age)	.029	0.009	.185	3.22	.001	2.704	
3	X <sub>2</sub> (Experience)	-.019	0.012	-.067	-1.623	.106	1.605	
4	X <sub>3</sub> (Job Characteristics)	.059	0.029	.072	2.03	0.043	1.098	
5	X <sub>4</sub> (Work-life Balance Policies)	.210	0.070	.207	3.00	0.003	2.104	
6	X <sub>5</sub> (Work Domain Support)	.337	0.068	.295	4.96	<.001	1.698	R <sup>2</sup> = 0.396 Adj. R <sup>2</sup> = 0.377 <i>F</i> (11, 348) = 25.56, <i>p</i> < .001
7	X <sub>6</sub> (Work-life Balance)	.116	0.044	.136	2.64	.009	1.583	AIC = 674.980 BIC = 721.613
8	D <sub>1</sub> (Marital Status)	-.172	0.099	-.111	-1.737	.083	2.106	
9	D <sub>2</sub> (Children)	.175	0.076	.109	2.30	.022	2.626	
10	D <sub>3</sub> (Family Type)	-.144	0.071	-.082	-2.036	.043	1.087	
11	D <sub>4</sub> (Middle Level)	.306	0.065	.158	4.697	<.001	1.970	
12	D <sub>5</sub> (Higher Level)	.495	0.135	.193	3.662	<.001	2.161	

### Conclusion

This study examined the incidence and covariates of job satisfaction among women in Kerala's IT sector. The descriptive and inferential statistical analysis results revealed the existence of job satisfaction, *albeit* moderately, among IT women. The IT companies can formulate and implement suitable policies to enhance their employees' job satisfaction through the appropriate manipulation of its covariates. In this context, the study attempted to identify the significant covariates of the job satisfaction of the IT women employees of Kerala. On the whole, ten factors were tested as covariates, keeping job satisfaction as the response variable.

Results bring to light that the age of the employee, job characteristics, work-life balance policies of the companies, the support from work domain, WLB of the employee, marital status, having children or not, type of family of the employee, and the level of designation of the employees were recognized as the significant covariates of the job satisfaction of the IT women of Kerala.

It can also be concluded that the job satisfaction of the IT women employees can be enhanced if the companies implement favorable policies of work-life balance, ensure positive characteristics of the job, and provide support in the work domain. A genuine work-life balance policy can be effectively used to enhance the sense of commitment and belongingness of the employees, which ultimately makes them feel satisfied with their job. Ensuring favorable job characteristics, such as fair pay, clarity of task, the task's significance, the autonomy of job, manageability of workload, and an efficient feedback system can also act as an essential stimulus for an employee to feel satisfied with her job. The support the women employees get from the organization, superiors, and peers acts as a significant organizational resource that impacts the employees' overall experience, which, in turn, brings job satisfaction. The timely promotion to higher designation levels will also enhance the job satisfaction of the IT women employees.

Job satisfaction of employees is of the utmost importance for every organization, as this is the essence that inculcates a feeling of commitment among the employees towards the organization, which promotes the retention of these invaluable resources. The magnitude of growth of every organization can be enlarged only with the stable support of these valuable human resources. Especially, the women in Kerala's IT sector should feel more contented with their job to stay grounded and bonded to their organization and contribute their best to the steady and undaunted growth of the organization and the industry at large.

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