Available online at http://www.ijims.com

ISSN: 2348 – 0343

The employee retention scale for Indian information technology (IT) company employees: The study of reliability

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Abstract

The objective of the research is to develop a scale for information technology (IT) employees in India. The employee retention scale included 18 items were administrated to 410 IT employees. Explanatory factor analysis (EFA) was used to determine the factors in this research. Four factors were identified - Appreciation and stimulation, Career opportunities with in the organization, Work life balance, Intention to stay in explanatory factor analysis. Data items were significant loading in factor analysis and no cross loadings were found. The cronbach alfa value was .903 which indicated strong reliability of the scale. All the analysis concluded that scale was reliable to measure employee retention in IT company employees.

Keyword: employee retention scale, EFA, reliability

Introduction

Employee retention in the organization affects their organizational performance and profitability. It's real hard to retain the employee talent in the long run and then most of the information technology (IT) company facing the problem of employee retention.

Employee retention refers to the ability of an organization to retain its employees. Employee retention was linked to various independent factors of the organization, which affect to the employee to retain at the organization over a period. Research indicated these factors were employee voice (Spencer, 1986) , organizational culture (Sheridan, 1992), employee motivation (Mak & Sockel, 2001), employee satisfaction (Brown & Yoshioka, 2003), flexibility in workplace (Richman, Civian, Shannon, Jeffrey Hill, & Brennan, 2008), supportive work–life policies (Richman et al., 2008),performance (Yurchisin & Park, 2010). (Gordon, 1990) discussed that organizations staffing functions and human resource policies increased the retention in the organization. He also discussed key staffing ability like recruitment and selection procedure affect retention. (Sheridan, 1992) investigated the relationship between organizational culture and employee retention, organizational cultural values differed altogether among the organizations. (Collin, 2009) concluded that other than the relationship in the middle of learning and the development of a work-related character, there likewise exists a relationship between organisational commitment and various learning processes. (Cascio, 2014) identified that positive employer brand, performance management strategies that helped workers to create aptitude that boost their potential and creative ways of working and linked to retention. (Beynon, Jones, Pickernell, & Packham, 2014) considered that attitude of organization different training for alternatives effected the employee retention that also results supported between the provision of training and employee retention.(Aminudin, 2013) considered that corporate social responsibility impact to Employee Retention and factor related to retention was intrinsic motivation, supervisory support and creativity.

Research Methodology

Design the research instrument : A research instrument was designed to measure employee retention in Indian information technology (IT) companies. To design the research instrument, firstly, literature review was completed and factors were identified from the literature. These factors were discussed from the expert panel and an expert panel consisted of expert from industry and academics. On this basis, we identified four factors for measuring the employee retention. Employee retention construct was measured by Appreciation and stimulation, Career opportunities with in organization , Work life balance and Intention to stay. Variables and their measurement statement and item coding are given below. * indicated the statement is reverse coded. Employee responses were captured in five point scale where 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agree.

Work life balance was adapted from(Gröpel & Kuhl, 2009) and (Sahu, 2010).

- Because of my work, I have no free time. * (WLBALANCE1)
- In my free time, I still deal with my work duties. * (WLBALANCE2)
- I often visit my friends and relatives. (WLBALANCE3)
- I am able to balance work priorities with my personal life. (WLBALANCE4)

Career opportunities with in organization was measured by 4 statements and adapted from (Chin-Yao Tseng, 2010)

- I believe my career aspirations can be achieved at this organization. (COPPORTU1)
- My boss takes a supportive role in my career development. (COPPORTU2)
- I have opportunities for career advancement at this organization. (COPPORTU3)

- My Job does not offer me the opportunities to future my career development.*(COPPORTU4)

Appreciation and stimulation was adapted from (Kyndt, Dochy, & Michielsen, 2009) and measured by 6 statement.

- Our ideas and interests are taken serious by executive staff. (APPASTI1)
- I have the feeling that I have to put my own ideas aside to meet the corporate strategy. * (APPASTI2)
- The Company motivates me to develop, if possible, my own work-related interests. (APPASTI3)
- My Company stimulates me to think about where I stand and where I need to get to achieve the company goals. (APPASTI4)
- My company gives me the opportunity to specialize in my strengths. (APPASTI5)
- In my job I am stimulated to think about the skills that I am good at. (APPASTI6)

Intention to stay measured by 4 items and was adopted from(Kyndt et al., 2009).

- I'm planning on working for another company within a period of three years. * (INTSTAY1)
- If I wanted to do another job or function, I would look first at the possibilities within this company. (INTSTAY2)
- If I received an attractive job offer from another company, I would take the job. *(INTSTAY3)
- I see a future for myself within this company. (INTSTAY4)

Sample of the study

The connivance sampling technique was used in this research. Data was collected from 410 respondents and three multinational companies (MNC) in the area of Information Technology. Numerous ways of data collection were implemented. Some Questionnaires were sent to the respondent by mail, and physically visited to the organization. The process of collection of data was carried out over a period of 6 months.

Table 1

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	4889.243
	df	153
	Sig.	.000

Data analysis

Data analysis was done using the exploratory factor analysis and reliability statistics with the help of Statistical Package for the social science (SPSS).

Table 2

Communalities

	Initial	Extraction
WLBALANCE1	1.000	.768
WLBALANCE2	1.000	.786
WLBALANCE3	1.000	.768
WLBALANCE4	1.000	.775
COPPORTU1	1.000	.780
COPPORTU2	1.000	.799
COPPORTU3	1.000	.810
COPPORTU4	1.000	.782
APPASTI1	1.000	.658
APPASTI2	1.000	.751
APPASTI3	1.000	.648
APPASTI4	1.000	.707
APPASTI5	1.000	.728
APPASTI6	1.000	.694
INTSTAY1	1.000	.735
INTSTAY2	1.000	.793
INTSTAY3	1.000	.738
INTSTAY4	1.000	.716

Extraction Method: Principal Component Analysis.

Table 3

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.811	37.840	37.840	6.811	37.840	37.840	5.048
2	2.809	15.604	53.444	2.809	15.604	53.444	4.169
3	2.106	11.702	65.146	2.106	11.702	65.146	4.557
4	1.711	9.505	74.651	1.711	9.505	74.651	4.365
5	.519	2.883	77.534				
6	.473	2.630	80.164				
7	.446	2.477	82.641				
8	.389	2.162	84.803				
9	.365	2.026	86.830				
10	.357	1.983	88.812				
11	.332	1.847	90.659				
12	.318	1.766	92.425				
13	.288	1.601	94.025				
14	.242	1.343	95.368				
15	.229	1.271	96.639				
16	.218	1.211	97.850				
17	.199	1.107	98.957				
18	.188	1.043	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Result discussion and Finding

In this section, instrument results were discussed, firstly Kaiser – Meyer – Olkin (KMO) measure used for sample adequacy and Barlett's test of Sphericity. In our research KMO coefficient was .892, which was greater .5 indicated the significant level of data adequacy. Barlett's test (Barlett's test of Sphericity =4889. 243, DF = 153, p =. 000) was significant (p-.000) and indicated in Table1. After that exploratory factor analysis (EFA) was performed using Principal component analysis with the Promax rotation method. Commonalities indicated in table 2 which showed extraction value greater than .5. Extraction value of (APPASTI3) .648 was the lowest and the extracted value of (COPPORTU3) .810 was the highest. The eigenvalue represented variable measures for the variance in all the variables which was represented by that component. The aggregate of the eigenvalues of all elements is equivalent to the quantity of variables. In table 3, it was clearly indicated that the total variance explained by 74.64% in this research and showed the four factors in the research. The first, second, third, fourth factors explained 37.84%, 15.60%, 11.70%, 9.50%, respectively in table 3.

Table 4

Pattern Matrix[a]

	Component			
	1	2	3	4
APPASTI2	.890			
APPASTI4	.835			
APPASTI6	.820			
APPASTI1	.817			
APPASTI5	.804			
APPASTI3	.799			
COPPORTU3		.916		
COPPORTU1		.881		
COPPORTU2		.878		
COPPORTU4		.878		
WLBALANCE4			.885	
WLBALANCE3			.877	
WLBALANCE1			.866	
WLBALANCE2			.862	
INTSTAY2				.873
INTSTAY4				.865
INTSTAY1				.863
INTSTAY3				.830

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.[a]

a. Rotation converged in 5 iterations.

It became clear indication that 18 statements of the scale had four sub variables having eigenvalues greater than 1. Pattern matrix was indicated in table 4 which represented the four factors Appreciation and stimulation, Career opportunities with in organization, Work life balance and Intention to stay. First factor Appreciation and stimulation was having the highest loading (APPASTI2=.89) and lowest loading (APPASTI3= .799). In factor two Career opportunities with in organization was having highest loading (COPPORTU3=.916) and lowest loading (COPPORTU4=.878). In third factor Work life balance was having highest loading (WLBALANCE4=.885) and lowest loading (WLBALANCE2=.862). In factor four Intention to stay was having the highest loading

(INTSTAY2=.873) and lowest loading (INTSTAY3=.830). These results in the pattern matrix were having the value greater .7 which indicated significant result in factor analysis. No cross loading was found in the research.

Reliability analysis

Relibility analysis was measured by Cronbach's Alpha. In this research Cronbach's Alpha value .903 for 18 items which indicated strong reliability of the employee retention scale. Another analysis performed related to reliability of employee retention scale was performing item analysis and calculating correlation coefficient between scale score and item score. Correlation item total value should be greater than .30 which was indicated in the table 5. Hence, employee retention scale was highly reliable.

Table 5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WLBALANCE1	54.21	163.001	.582	.897
WLBALANCE2	54.20	160.835	.601	.896
WLBALANCE3	54.02	162.415	.579	.897
WLBALANCE4	54.29	162.994	.583	.897
COPPORTU1	54.20	164.747	.503	.899
COPPORTU2	54.15	164.952	.542	.898
COPPORTU3	54.13	164.624	.490	.900
COPPORTU4	54.11	164.885	.524	.898
APPASTI1	54.16	166.711	.502	.899
APPASTI2	54.09	163.633	.536	.898
APPASTI3	54.01	165.120	.542	.898
APPASTI4	54.05	162.114	.569	.897
APPASTI5	54.04	161.561	.616	.896
APPASTI6	54.00	164.648	.573	.897
INTSTAY1	54.38	164.157	.538	.898
INTSTAY2	53.98	161.780	.588	.897
INTSTAY3	54.27	162.504	.574	.897
INTSTAY4	54.23	165.326	.511	.899

Conclusion : In this research ,it was aimed to conduct exploratory factor analysis and reliability studies of employee retention scale. The scale administrated on 410 Information Technology (IT) employees where Cronbach alfa value was calculated as .903 for 18 statements. Exploratory factor analysis determined four factor that were Appreciation and stimulation, Career opportunities with in organization, Work life balance and Intention to stay. Hence we concluded that above mentioned finding in the research clearly indicated reliability of the scale on Information Technology(IT) employees in India.

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