A study on impact of Job Characteristics on Turnover intention of employees in IT industry in India

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Abstract
Despite of many researches on turnover intention of information technology employees, the IT industry ranks as one of the top five industries with high employee turnover. Job characteristics are discussed as one of the key factors related to employees’ intention to stay in the organisation. The purpose of the survey was to test the theoretical framework on the impact of Job characteristics on turnover intention of IT employees through employee engagement. The results showed a negative relationship between Job characteristics and turnover intention; employee engagement and turnover intention of IT employees. This implies that intensification of Job characteristics and employee engagement in the organisation would decrease the turnover intention of their employees.

Introduction
The primary research problem addressed in this study is increasing level of voluntary turnover of information technology (IT) employees. The annual reports of the top 10 IT companies (IBEF report 2018) highlights turnover intention as one of their focus area to retain talented workforce. As per the annual report of Infosys in 2018, the company has recorded 16.4% of employee turnover and Wipro experienced 16.6% of voluntary turnover. While research related to IT employees have been in highlight over the last five years, additional research is needed to understand what causes the intention to quit (Pai, Yeh, & Huang, 2012).

Review of Literature
Many researchers have indicated that handling attrition, attracting and retaining talent, cultivating leadership and employee engagement are the top challenges faced by the Indian IT industry. Human capital is one of the organisation’s intangible assets. It is the reserve of competencies, experience and ability to perform in the organization so as to produce economic value. According to Joo and Mclean (2006) engaged employees are the resilient assets for the organisation, they engaged workforce provide a sustained competitive advantage for the organisation in the IT industry. When the organization’s workforce is stable, customer relationships become stronger and customers depend on the organization’s talented people for their product awareness, innovative skills, industry experience, held competencies and proven performance. Thus retention of these employees becomes critically important for any organisation for the major reasons: talented employees are the influential asset of any organisation that drives the organisation’s performance.

Job characteristics are the aspects of jobs that have motivational influence on the employees. The well-known job characteristics model was developed by Hackman and Oldham (1975, 1976, & 1980). This model categorizes five core job characteristics: skill variety, task identity, task significance, autonomy, and feedback. Skill variety is the degree to which a job requires the employees to use variety of skills and talents. Task identity is the extent to which the job requires the employees to identify and complete whole and identifiable piece of work, or employees would like to experience handling a task from beginning to end rather being part of the work. Task significance is the degree to which the job has a significant importance on the lives or work of other people. Autonomy is the extent to which the job provides the employee to be independent in scheduling the work and to make decisions used in carrying it out. Feedback is the degree to which the job provides specific and clear knowledge about the level of effectiveness of one’s performance.
The basic model to study the Turnover of employees was developed by March and Simon (1958), Currivan causal model (2000) restricted the analysis of Turnover intention to employee work place alignments. Dalluay, et al, (2017) has studied on working conditions over job satisfaction. The current study focuses on the factors that influence employee’s turnover intention, based on the current global scenario. The need of the diversified and young workforce remains uncovered. Further, the existing literatures focuses more on the of HRM practices in the organizations. On the contrary, to meet the need of Millennial who are currently contributing the major workforce; there is a need for a research on the Job characteristics and employee engagement. The present research study is carried out with the objective, to help the organization to focus on the factor that deliberately influences employees’ intention to stay in the organization.

Research Methodology

The Job Characteristics is the independent variable used in this study, the Moderating variable is employee engagement and the dependent variable is turnover intention. The primary objective of this study is to understand the influence of Job Characteristics on employees’ turnover intention through employee engagement of employees in the IT industry. And also to analyse, if there is any significant association between demographic profiles of the employees with the Job Characteristics and Employee engagement in IT industry.

Hypothesis

• $H_{01}$: There is no significant relationship between Job Characteristics and employee engagement of employees working in IT industry.

• $H_{02}$: There is no significant relationship between employee engagement and turnover intention of employees working in IT industry.

• $H_{03}$: There is no significant relationship between Job Characteristics and turnover intention of employees working in IT industry.

This study uses quantitative data for analysing the hypothesis of the study. Quantitative research is done based on primary data collection sources.

Population and Sampling

The sampling technique followed for this study is convenient sampling. The top 5 companies as per the IBEF report in 2018 are selected for the study. All junior and mid management level employees from those companies are considered for the study. A total of 469 samples were found to be valid for the study.
Primary Source of Instrumentation

This study is analysed based on data gathered from Primary source through a structured questionnaire. Each Questionnaire has 50 items. Apart from demographic related questions, the questionnaire is estimated using 5 Point Scale which ranges from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire is enclosed with inventories which have been validated for the variables. The following validated inventories have been used in this study:

<table>
<thead>
<tr>
<th>S No</th>
<th>Variables</th>
<th>Source of Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Job Characteristics</td>
<td>Morgeson, &amp; Humphrey, (2006)</td>
</tr>
<tr>
<td>2</td>
<td>Employee Engagement</td>
<td>Henryhand, C. J. (2009)</td>
</tr>
<tr>
<td>3</td>
<td>Turnover Intention</td>
<td>MOAQ-TI</td>
</tr>
</tbody>
</table>

Demographic Information Survey

Demographic Information was collected from all participants with relation to the following information:
- Gender
- Age
- Marital status
- Spouse’s employment status of married IT employees
- Number of dependents of IT employees
- Educational qualification
- Total work experience in IT industry
- Number of companies switched
- Work experience in the current Organisation
- Job category
- Experience in the current designation

All the aforesaid items, were put together to form the 50 item questionnaire. A pilot survey was conducted for this questionnaire, the results are presented in the below section.

Pilot Study

Reliability is measured by using the Cronbach’s alpha coefficient. In the statistics the test using the Cronbach alpha should be greater than 0.5, to attain the perfect reliability of the questionnaire. Pilot study is small scale analysis done to predict the responses of variables of the main study. The present pilot study was done with 30 samples to check validity and reliability of the questionnaire with Cronbach’s Alpha coefficient. From the Cronbach Alpha testing, the obtained value is 0.79 which is closer to 1.0 which implies that the reliability of the questionnaire is good for the analysis.

Tools used for Statistical data analysis

The methods involved in the primary data collection were through direct survey and online survey. The Statistical tools used are as follows:
- **ANOVA:** Analysis of Variance (ANOVA) is a statistical technique utilized to analyse differences among 2 or more means. Demographic parameters like Age group, Job Category were plotted individually against Job Characteristics and employee engagement to understand the level of significant differences of opinion of the respondents.
- **One Sample T Test:** The demographic parameter of Gender was plotted individually against Job Characteristics and employee engagement to understand significant differences within groups.
• Regression: Multiple linear regression was been applied to study the effect of Job Characteristics on employee engagement, employee engagement on Turnover Intention and Job Characteristics on Turnover Intention.

Results and Discussion
This section presents the results of data analysis obtained from the primary data. The results obtained include the response rate of respondents, the demographic profile of respondents and descriptive statistics reflecting the characteristics of the sample. This section also examines the hypotheses by applying regression analysis. Standard Statistical Package for Social Sciences (SPSS - version 20) software is used for analysing the data.

Demographics of employees in IT industry
• Gender: It shows that most of the respondents are Men of 64% and the Women respondents are 36%.
• Age Group: Most of the respondents are from the age group of 26-35 years old of 50%, 33% of them less than 25 years, and 17% are above 36 years old. The average age of the respondents is 25.7 years.
• Marital status of IT employees: The respondents frequency are Married 49%, 48% are under ‘single’ status, and 3% are in ‘divorced' status.
• Spouse’s employment status of married IT employees: For the married employees, spouse employment status was analysed and it was found that most of the respondents have their spouse employed 82% and the remaining do not 18%.
• Number of dependents: 42% has no dependents, 28% respondents have 2 dependents on them, 16% has single dependent on them, 10% of the respondents have 3 dependents, and 4% of the respondents have 4 dependents.
• Educational Qualification: 64% of the respondents have completed under graduation and remaining 36% have done post-graduation.
• Total Work Experience in the IT industry: Most of the respondents has 9.1-12 years of experience that is 35%, 23% of the respondents has less than 3 years of experience, 20% of the respondents has more than 12 years of experience, 12% of the respondents has 3.1-6 years of experience and 10% of the respondents has 6.1 – 9 years of experience.
• Number of companies switched: 45% of the respondents hasn't changed the companies in their working profile, 41% of them has switched 1-2 companies in their work profile, 13% of them has changed 3-5 companies in their work profile and 2% has changed more than 5 companies in their work profile.
• Work experience in the current Organisation: 37% of the respondents has less than 3 years of experience in the current organization, 30% of the them has 3.1 – 6 years of experience in current organization, 17% of the them has 9.1 – 12 years of experience in current organization, 11% of the them has 6.1 – 9 years of experience in current organization, and 5% of the them has more than 12 years of experience in current organization.
• Job Category: It is inferred that, 30% of the respondents are of Engineer/ team members, 18% are of Technical Architect, 18% are of Technical Lead, 17% are of Team Lead, 7% are in the category of Project Lead, 6% are in the category of Project manager, 4% are from the Delivery Head unit job category.
• Experience in current designation: 60% have less than 3 years of experience in current designation, 35% have 3.1 – 6 years of experience in current designation, and 5% have 6.1 – 12 years of experience in current designation.

Job Characteristics and Employee Engagement
For studying the impact of Job Characteristics on employee engagement, the regression is computed between these two variables and the results are presented below.
HYPOTHESIS I:

$H_01$ There is no significant relationship between Job Characteristics and employee engagement of employees working in IT industry.

Dependent variable: Employee Engagement (Y)
Independent variable: Job Characteristics (X)
R Square value: 0.854
Adjusted R Square value: 0.854
F value: 2731.563
P value: 0.000**

Table 2: Multiple Regression Analysis between Job Characteristics and Employee Engagement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized co-efficient</th>
<th>SE of B</th>
<th>Standardized co-efficient</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.138</td>
<td>.072</td>
<td>1.910</td>
<td>.037*</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>1.016</td>
<td>.019</td>
<td>.724</td>
<td>52.264</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Note: ** Denotes significant at 1% level
* Denotes significant at 5% level

The multiple correlation coefficient is 0.724 measures the degree of relationship between the actual values and the predicted values of Employee Engagement(Y). Because the predicted values are obtained as a linear combination of Job Characteristics (X), the standardized coefficient value of 0.724 specifies that the relationship between Employee Engagement (Y) and the Job Characteristics (X) is quite strong and positive.

The multiple regression equation is

\[ Y = -.138 + 0.724(X) \]

Thus the Null Hypothesis, “There is no significant relationship between Job Characteristics and employee engagement of employees working in IT industry” is rejected and it can be concluded that there is significant relationship between Job Characteristics and employee engagement.

Employee Engagement and employees’ Turnover Intention

For studying the impact of employee engagement on employees’ turnover intention, the regression is computed between these two variables and the results are presented below.

HYPOTHESIS II:

$H_02$ There is no significant relationship between employee engagement and turnover intention of employees working in IT industry.

Dependent variable: Employees’ turnover intention(Y)
Independent variable: Employee Engagement (X)
R Square value: 0.515
Adjusted R Square value: 0.514
F value: 496.348
P value: 0.000**

Table 3: Multiple Regression Analysis between Employee Engagement and employees’ Turnover Intention

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized co-efficient</th>
<th>SE of B</th>
<th>Standardized co-efficient</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.138</td>
<td>.157</td>
<td>38.874</td>
<td>.000**</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>-.958</td>
<td>.043</td>
<td>-.718</td>
<td>-22.279</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Note: ** Denotes significant at 1% level
The multiple correlation coefficient is 0.718 measures the degree of relationship between the actual values and the predicted values of Employees’ turnover intention (Y). Because the predicted values are obtained as a linear combination of Employee Engagement (X), the standardized coefficient value of 0.718 specifies that the relationship between Employees’ turnover intention (Y) and the Employee Engagement (X) are quite strong and negative.

The multiple regression equation is

\[ Y = -.138 -0.718(X) \]

Here the coefficient of X is -0.718 represents the impact of employee engagement on employees’ turnover intention. The estimated negative sign implies that such effect is negative that employees’ turnover intention would decrease by 0.718 for every unit increase in employee engagement and this coefficient value is significant at 1% level.

Thus the Null Hypothesis, “There is no significant relationship between employee engagement and turnover intention of employees working in IT industry” is rejected and it can be concluded that the employees’ intention to quit the organisation decreases if they have better employee engagement in the organisation where they are employed.

**Job Characteristics and employees’ Turnover Intention**

For studying the impact of Job Characteristics on employees’turnover intention, the regression is computed between these two variables and the results are presented below.

**HYPOTHESIS III:**

\[ H_{03} \]

There is no significant relationship between Job Characteristics and turnover intention of employees working in IT industry.

Dependent variable: Employees’ turnover intention (Y)
Independent variable: Job Characteristics (X)
R Square value: 0.658
Adjusted R Square value: 0.657
F value: 897.882
P value: 0.000**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized co-efficient</th>
<th>SE of B</th>
<th>Standardized co-efficient</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>7.032</td>
<td>.148</td>
<td></td>
<td>47.646</td>
<td>.000**</td>
</tr>
<tr>
<td>X</td>
<td>-1.190</td>
<td>.040</td>
<td>-.811</td>
<td>-29.965</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Note: ** Denotes significant at 1% level

The multiple correlation coefficient is 0.811 measures the degree of relationship between the actual values and the predicted values of Employees’ turnover intention (Y). Because the predicted values are obtained as a linear combination of Job Characteristics (X), the standardized coefficient value of 0.811 specifies that the relationship between Employees’ turnover intention (Y) and the Job Characteristics (X) are quite strong and negative.

The multiple regression equation is

\[ Y = 7.032 -0.811(X) \]

Here the coefficient of X is -0.811 represents the impact of Job Characteristics on employees’ turnover intention. The estimated negative sign implies that such effect is negative that employees’ turnover intention would decrease by 0.811 for every unit increase in Job Characteristics and this coefficient value is significant at 1% level.
Thus the Null Hypothesis, “There is no significant relationship between Job Characteristics and turnover intention of employees working in IT industry” is rejected and it can be concluded that the employees’ intention to quit the organisation decreases if they have healthier Job Characteristics in the organisation where they are employed.

**Job Characteristics and Employee Engagement with Age group**

The ANOVA test has been applied to Job Characteristics and Employee Engagement, to determine whether they are significant with Age group. The results are presented in the below table.

**Table 5: ANOVA test for Job Characteristics and Employee Engagement with Age group**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Items</th>
<th>Age Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Job Characteristics</td>
<td>&lt;=25</td>
<td>157</td>
<td>3.6961</td>
<td>.80052</td>
<td>3.781</td>
<td>.024*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-35</td>
<td>233</td>
<td>3.6450</td>
<td>.83642</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above 36 years</td>
<td>79</td>
<td>3.3882</td>
<td>.90836</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>469</td>
<td>3.6189</td>
<td>.84218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Employee Engagement</td>
<td>&lt;=25</td>
<td>157</td>
<td>3.6385</td>
<td>.94834</td>
<td>5.221</td>
<td>.006**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-35</td>
<td>233</td>
<td>3.5735</td>
<td>.86488</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above 36 years</td>
<td>79</td>
<td>3.2421</td>
<td>1.00466</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>469</td>
<td>3.5394</td>
<td>.92608</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** * Denotes significant at 5% level  
** Denotes significant at 1% level

The F-values of Job Characteristics and Employee Engagement are statistically significant at the level of 1% and 5% respectively. This indicates that age group less than 36 years demand better Job Characteristics and Employee Engagement in the organisation to stay.

**Job Characteristics and Employee Engagement with Job Category**

The ANOVA test has been applied to Job Characteristics and Employee Engagement, to determine whether they are significant with Job category.

The F-values of Job Characteristics and Employee Engagement are not statistically significant. This indicates that job category does not have any influence on the Job Characteristics and Employee Engagement in the organisation. Hence it could be summarized that IT employees in all the job categories perceive the Job Characteristics and Employee Engagement in similar manner.

**Job Characteristics and Employee Engagement with Gender**

The T-test has been applied to Job Characteristics and Employee Engagement, to determine whether they are significant with Gender. The results are presented in the below table.

**Table 6: T-test for Job Characteristics and Employee Engagement with Gender**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Items</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Job Characteristics</td>
<td>Male</td>
<td>302</td>
<td>3.5883</td>
<td>.86412</td>
<td>1.045</td>
<td>.296</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>167</td>
<td>3.6742</td>
<td>.80055</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Employee Engagement</td>
<td>Male</td>
<td>302</td>
<td>3.5062</td>
<td>.93002</td>
<td>1.057</td>
<td>.281</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>167</td>
<td>3.5996</td>
<td>.91861</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The T-values of Job Characteristics and Employee Engagement are not statistically significant. This indicates that gender does not have any influence on the Job Characteristics and Employee Engagement. Hence it could be summarized that both men and women perceive the Job Characteristics and Employee Engagement in similar manner.

Conclusions

The above study clearly says that Job Characteristics plays a key factor in Employee engagement irrespective of Job category and Gender in the IT industry. This has been proven again with increase in Employee engagement decreases the turnover Intention of IT Employees irrespective of Job category and Gender in the IT industry. However this study emphasizes that less than 36 years age group employees demand better Job characteristics and Employee engagement to stay in the organisation. The HR practices should start to focus on developing diverse and smart policies that cater to Millenials and other generational employees to reduce turnover intention through the IT Industry best Employee engagement practices and work environment with better Job characteristics.

Limitations of the study

- The data has been collected only from companies that have responded to the survey.
- The study is limited to employees in Indian IT industry.
- Only junior and mid management level employees in IT industry participated in the study.
- The turnover intention in a company is highly sensitive information for an employee to share. Hence this study doesn’t disclose the personal information of the respondents.
- The responses of the participants during the survey are their own and may have an impact on results. Hence careful generalization of the findings is restricted only to the IT industry.

Recommendations for future research

- This study focuses on Job characteristics and its influence on turnover intention of employees in IT industry. Employee empowerment and Job enrichment are the other areas of research that may have impact on turnover intention of employees in IT industry.
- Autonomy can be a major Job characteristic that should be more focused as millenials will be part of at least 30% of the work force in next few years.
- Skill variety and task significance are also potential Job characteristics that need to be taken on priority to provide clear, simple and agile goals for the millennial workforce.
- Performance appraisal also plays a major role on how Feedback needs to be improved from current annual performance appraisal system to monthly or quarterly feed forward to ensure that employees stay on par with their goals.

References


