

# Impact of Age, Gender and Job Satisfaction on Employee Engagement in the IT sector



Sadhna Sudershana, Ipseeta Satpathy, B.C.M Patnaik

**Abstract:** *The present analysis has been conducted to understand the influence of job satisfaction, gender and age on the employee engagement levels in the Information and Technology sector. 196 bona fide questionnaire responses were received from two Information Technology (IT) firms in Odisha, India to perceive the impact of factors like job satisfaction, age and gender on the work commitment levels of employees. Correlation analysis was done to unravel the interrelationship linking gender, age and job satisfaction. The findings indicated that there was no effect of gender or age on the engagement of employees in the IT sector. Gender and age were independent of each other but influenced the Job satisfaction of the employees in the IT area. The goodness of fit was calculated for the dataset by doing the chi square test. Based on the values, for the first and the second hypothesis the null hypothesis was rejected and the alternative was selected. For the third hypothesis the null hypothesis was accepted. This showed that age and gender do not have a major impact on engagement in IT employees. But job satisfaction has a positive association with employee engagement. Regression analysis was also carried out to check the relationship between age and gender which are the independent variables with job satisfaction which is dependent. It was concluded that there is a 50% association between the independent and dependent variables. Thus organizations should make sure that the work culture is a healthy mix of the right elements so that a diverse taskforce is always driven to work and shares mutual goals with the organization.*

**Keywords:** Age, Employee Engagement, Gender, Information Technology sector, Job profile, Job satisfaction.

## I. INTRODUCTION

Engagement and Disengagement are two sides of a coin in today's scenario. Engaged employees are otherwise referred to as 'happy' employees. They are the ones who are delighted to walk to work every Monday morning. On the flip side, disengaged employees are those who are detached from work and do not feel motivated to accomplish. Based on a recent Gallup poll, if the work force is prototypical, about one-third of your employees are actively engaged. It was found that 49 per cent, are disengaged while 18 per cent are actively disengaged.

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Disengagement steers the organization to a probable loss of its most valued talent the employees are actively engaged.

The poll even found that nearly half, or 49 per cent, are disengaged while 18 per cent are actively disengaged. Engaged workers have the brightest of faces every Monday morning and usher their organization on the path of success. The IT sector is extremely vulnerable these days relating to high levels of employee attrition. There are a plethora of reasons backing this unstable scenario. The problems range from age issues, gender bias, job satisfaction limitations, improper talent-pool management, inaccurate division of labor, inadequate talent recognition, lack of proper compensation benefits, ill managed employee relations and many more. The ebullient job market and constant debilitation of employees are the core characteristics of the Indian IT industry.

### A. Job satisfaction:

One of the most significant causative agents to gauge the engagement index in employees is job satisfaction. This term was identified by Locke (1976) after skimming through 3000 odd studies relating to a series of factors affecting satisfaction levels at work. Satisfaction at work refers to a condition where the employee feels happy and driven towards his work provided the values at work show harmony with the needs (Hoppock, 1935). The contentment at one's workplace hints at a plethora of emotions both pleasant and unpleasant that connect the individual with his or her job. The ebullient Information and Technology sector is growing by leaps and bounds and has turned up as one of the fastest growing industry. According to the NASSCOM Annual report of 2015 this industry provides employment to around 2.5 million individuals thereby imparting massively to the Indian economy .

A variety of dynamics, benchmarks and management based applications are needed for this sector (MM Joy, 2018). Lately there has been a host of ups and downs in this industry. Talent retention, talent management and talent acquisition have become the biggest challenges faced by the Information Technology world. The present taskforce has been uncompromising in case of job selection and "job hopping" has become the new trend. In the present-age, retaining employees has become the major concernment and the main aim of the IT industry (Chaudhuri, Hirudayaraj and Ardichvili, 2018). The two categories of factors impacting job satisfaction levels are i) Job content factors (depends on the individuals) (ii) Job context factors (depends on the organization).

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The former talks about the built in or the intrinsic motivation such as satisfaction, self-confidence, mastery, recognition, competitiveness and the like. These are a set of internal rewards that the employee feels when he accomplishes a certain work at his workplace. The latter is put forth as maintenance factors which are extrinsic by nature such as fringe benefits, maternity leave, overtime compensation etc. Both the external and internal motivation have been explained in a detailed manner in the book "Human Behaviour at work" by Keith Davis and Jon W. Newstrom (1985). Thus, job satisfaction is an extremely significant determinant to measure the organizational commitment index in employees. Based on this the commitment levels can be further classified into normative, continuance or affective. In simple terms affective commitment related to the connect of the staff to the company's values. Continuance refers to the willingness of the employee to continue with his services towards the same organization. Normative talks about the measure of the sense of responsibility of the worker towards the firm.

## B. Age:

Age plays a key driver in affecting engagement levels. There are various theories related to the role play of age related analysis is scrutinizing work commitment. In a study of engagement of mature age workers and stereotype threat (Kulik, Perera and Cregan, 2016) it was found that aged workers were negatively impacted by conventional threats and their engagement reduced. Mature age staff performed better under older managers instead of young ones. Thus, both diversity blind and diversity conscious practices should be included in firms to accelerate commitment levels of mature employees.

Another research proved that with age comes higher levels of commitment due to regulated emotions and strong career commitment (Kim and Kang, 2017). This paper spoke about the fact that maturity seeps in after a certain age and workers get a hold on their emotions thereby proving to be emotionally intelligent thereby finding it easier to stick to their career goals and long term vision.

A third study highlighted the issues in the ageing society and the lack of participation of mature age workers in training programs. To counter this problem the researchers established the inclusion of a range of factors such as personal, motivational, learning needs and institutional factors within the vocational and educational training system (Meyers, Billett and Kelly, 2014). Hence age does act as a major determinant to steer engagement levels in employees.

## C. Gender:

With the economy booming and countries competing against each other to give a fillip to their GDP, the job sector across has become more volatile, competitive and talent hunting. Burgeoning opportunities are pushing individuals to join work and the gender gap is reducing. Yet, gender remains as one of the consistent factors in gauging dedication and devotion towards work.

One study spoke about the impact of gender discrimination on the engagement of women employees in the IT sector. The investigation further found that women employees do not

perceive any discrimination from managers or co-workers and the organization does not give any preferential treatments to either gender (Sathyanarayana and Nair, 2018). Another investigation showed that female employees are more loyal whereas male employees are high performers but less loyal. The females have more normative and affective commitment whereas males have more situational commitment (Haque and Yamoah, 2014). Various investigative researches worked on gender's effect in measuring employees' commitment towards work. Thus, the role play of gender cannot be ignored while calculating engagement of employees in organizations.

## D. Relation between Gender, Age and Job satisfaction and their influence on employees:

Engagement at work is greatly regulated by various elements. Job satisfaction, age and gender are the major drivers of engagement. A host of evaluation has been done in various sectors to compute engagement magnitude. Different sectors have been considered to understand the connection between the above three factors and their influence on each other. In a research study related to organizational culture as a prognosticator of job satisfaction and also taking into account the role of gender and age (Bellou, 2010) three public hospitals were scrutinized through a survey. It was observed that employees identify cultural traits such as fair work policies, scope for personal growth and reputation as accelerating agents for job satisfaction. Gender and age affect the way in which values of an organization impact job satisfaction levels. Another inquiry happened in Singapore for a group of different categories of accountants to test the influence of age on job satisfaction (Ang, Goh and Koh, 1993). This established that both age and job types control the extent of satisfaction in the job. Older accountants seemed happier but it was also dependent on their kind of job.

## II. OBJECTIVES OF THE STUDY

- ✓ To investigate the impact of age and gender on employee engagement in the Information and Technology sector.
- ✓ To enumerate the significance of job satisfaction and its effect on the degree of engagement of the Information technology employees.
- ✓ To establish the correlation between job satisfaction, age and gender, if any and establish their role in regulation of engagement in employees.

## III. HYPOTHESES

- ✓ H1: Gender does not hold a significant effect on engagement in IT sector employees.
- ✓ H2: There is no crucial impact of age on engagement in Information Technology employees.
- ✓ H3: Job satisfaction has no notable relationship with engagement in employees of the IT sector.

## IV. METHODOLOGY

The current analysis included 196 samples from an entire population of around 4000 employees in Bhubaneswar, Odisha, India.

For this investigation convenient sampling method which is was adopted. This technique is non-probabilistic . Data collection was done by personally visiting the organizations. Data was also collected through personal references. A total of 300 questionnaires were distributed amongst the employees and 240 questionnaires were got back. After ruling out the incomplete ones, 196 questionnaires were preserved for the research. Information about the personnel was gathered from the organization’s database. The staff were requested to fill in the data sincerely to keep away from any kind of bias. The questionnaire was divided into five sections. These sections included demographic factors like age, gender and others like job satisfaction, motivation and learning and development. In total there were 30 items in all the sections. The total set of responses was scaled on a five point measuring Likert scale. “1=strongly disagree to 5=strongly agree”.

The survey showed that out of the total respondents 72 were females which accounted for 36.73% of the sample. The remaining 124 (63.27%) were males. Out of the total 196 samples, 69.39% (136)of the respondents fell into the age group of 25 to 40 where as the remaining 30.61% (60) were in the age group of 40 years and above. Univariate analysis was done for each item in the questionnaire and thus the standard deviation and mean value was found for each item.

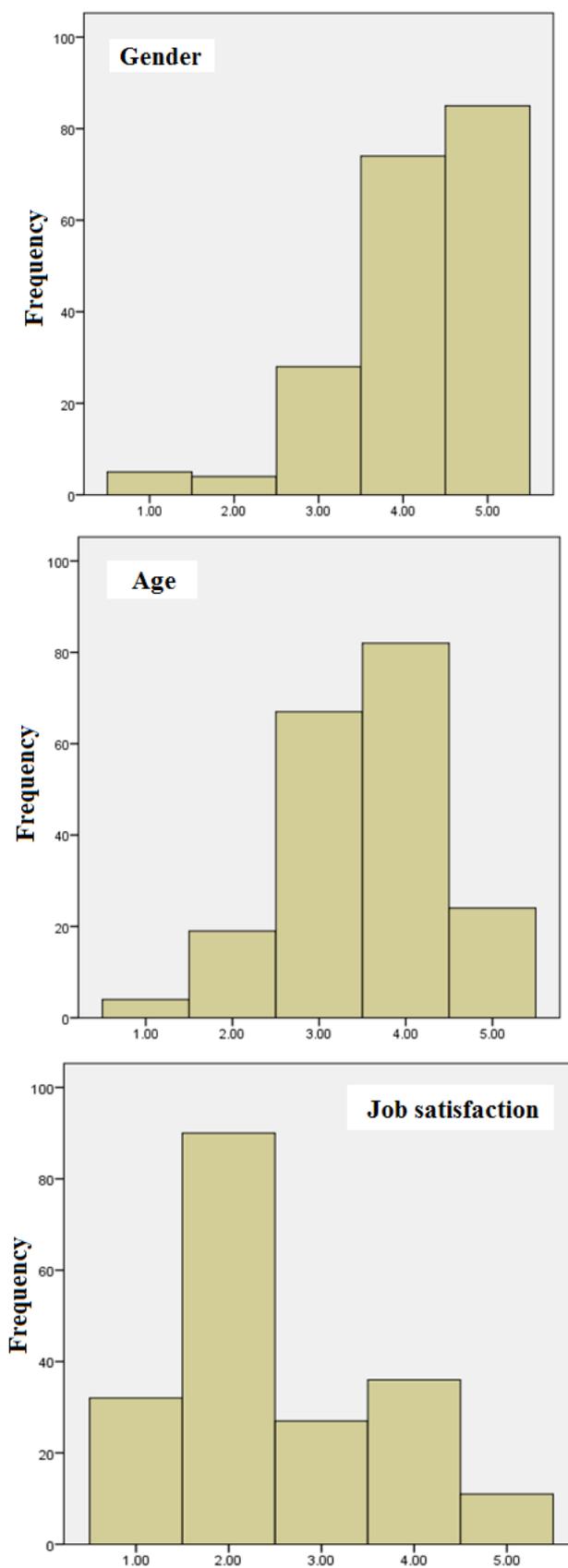
The questions related to the impact of gender on engagement had the highest agreement amongst all the items with their means greater than 4 indicating strongly that there was no gender bias, equal respect for genders, proper gender sensitization and no bias in assigning roles and responsibility based in gender. The questions related to age had means ranging 3.15-3.90 with standard deviation of ~1. The lowest mean of 3.15 was for the question, "The employees in the age group 45 to 55 are the best decision-makers". There were agreements on questions related to job satisfaction with means between 3.58 and 3.94 and standard deviation ~1. However, most of the respondents disagreed on switching their job for a higher package but a poorer profile with a mean score of 2.21.

**V. ANALYSIS AND RESULTS**

All the 30 questions were categorized into 5 different sections i.e. motivation, learning and development, age, gender and job satisfaction. For our study the respondent's data related to only the age, gender and job satisfaction were analyzed. Responses from relevant questions from each of the three criteria (age, gender and job satisfaction) were subject to statistical analysis.

**A. Normality and Goodness of Fit**

The data sets for all the three criteria (age, gender and job satisfaction) were first checked if they follow a normal distribution. All the three data sets failed the Shapiro–Wilk’s ( $p > 0.05$ ) (Shapiro and Wilk, 1965; Razali and Wah, 2011) normality tests. The visual inspection of the histogram (Fig. 1) and normal Q-Q plots (Fig. 2) also indicated the data to be non-normal.



**Fig.1. Histograms for the Gender, Age and Job Satisfaction category respondent data.**

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The goodness of fit was computed by conducting the Chi-square (X2) test. For both first (H1) and second (H2) hypothesis the chi-square value was significant ( $p < .05$ ) with  $X^2(16,196) = 276.73$ ,  $p = .00001$  and  $X^2(16,196) = 158.48$ ,  $p = .00001$  respectively. Hence, for both H1 and H2, we reject the null hypothesis and accept the alternative hypothesis indicating that there is no significant impact of age and gender on employee engagement in the IT sector. However, for the third (H3) hypothesis, the Chi-square test was insignificant with  $X^2(16,196) = 16.38$ ,  $p = .427$ . Thus we accept the null hypothesis and conclude that there is a notable relationship in between employee engagement and job satisfaction.

## B. Correlation Analysis

In order to evaluate the relationship between the three variables: age, gender and job satisfaction, a correlation analysis was carried out by computing the Pearson correlation matrix (Table-I). The Pearson correlation coefficient ( $r$ ) between age and gender shows almost no correlation with value 0.019. However, there is a weak correlation between both age and job satisfaction ( $r = 0.363$ ) and gender and job satisfaction ( $r = 0.358$ ). Hence age and gender are independent variables and have no association with each other whereas job satisfaction has a weak dependency on both age and gender.

**Table- I: Pearson correlation matrix between gender, age and Job satisfaction**

Pearson Correlation Matrix			
Category	Gender	Age	Job Satisfaction
Gender	1	0.019	0.358
Age	0.019	1	0.363
Job Satisfaction	0.358	0.363	1

## C. Regression Analysis

In order to ascertain the robustness of the association between the dependent variable (job satisfaction) and the two independent variables (age and gender) we computed the correlation coefficient,  $R$ , and the coefficient of determination,  $R^2$  (Table-II). The  $R$  value of 0.505 indicates a 50% association between job satisfaction and the two independent variables, age and gender. The coefficient of determination ( $R^2$ ) value of 0.255 indicate that only a 25% of total variation in the dependent variable (job satisfaction) can be elucidated by the bond between job satisfaction and the two independent variables age and gender as described by the regression equation below:

$$Y = a + b_1X_1 + b_2X_2 \quad (1)$$

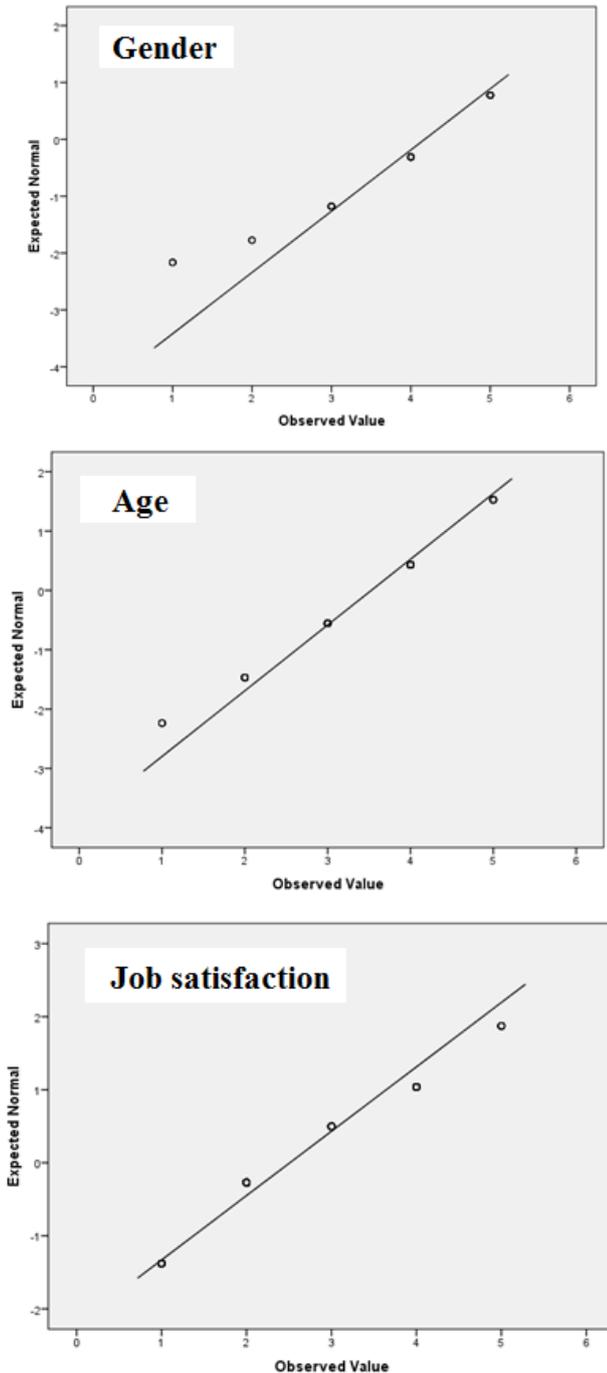
Where  $Y$  is the dependent variable (Job satisfaction),  $X_1$  dependent variables (age),  $X_2$  dependent variables (gender), 'a' is the intercept, 'b1' and 'b2' are the slope. Substituting the values for 'a, b1 and b2' from the analysis (Table-III), the regression equation for our study would be:

$$Y = 0.92 + 0.356X_1 + 0.351X_2 \quad (2)$$

**Table- II: Model summary showing the correlation coefficient,  $R$ , and the coefficient of determination,  $R^2$**

Model Summary				
Model	R	$R^2$	Adjusted $R^2$	Std. Error of the Estimate
1	.505 <sup>a</sup>	0.255	0.247	0.88453

a. Predictors: (Constant), Age, Gender



**Fig.2. Normal Q-Q plots for the Gender, Age and Job satisfaction respondent data showing non-normal distribution.**

Table- III: Coefficients table with a, b1 and b2 values

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
Constant	0.92 (a)	0.356		2.59	0
Gender	0.35	0.062	0.351 (b1)	5.65	0
Age	0.36	0.062	0.356 (b2)	5.73	0
Dependent Variable: Job satisfaction					

VI. CONCLUSION

The current study throws light on various aspects of employee engagement in the IT industry. Talent acquisition, talent management and retaining talent have become the biggest concerns for this sector in the present times. The investigation indicates that the data set is non-normal and hence follows a trend where various factors influence the extent of engagement. Chi square test for the different items prove that age and gender do not affect engagement in employees to a large extent. But job satisfaction plays an important role on the magnitude of engagement. The word commitment is the most difficult concept in the world of Management (Cohen 2003, Cooper-Hakim and Viswesvaran 2005). Employee commitment is one of the main predictors of the attitude of an employee and indicates the turnover behavior (Matheiu and Zajac, 1990). The tests established that employees need to be happy with their job profile and job expectations to feel self-motivated and high performers. The correlation analysis showed the inter-relationship between gender, age and job satisfaction and highlighted that there was weak association between the variables. Regression analysis spoke about the association between the dependent variable that is job satisfaction and the independent variables age and gender. It showed that there was a 50% link between the independent and the dependent variables. Hence this investigation has made it clear that gender does not have a defined influence on engagement. Issues arising for mature age workers can be corrected with the right vocational training and the correct job type. Job satisfaction controls engagement levels in IT employees and associated elements such as job profile, job responsibilities, scope for growth, salary equity, etc. matters a lot to keep the employees motivated and happy.

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