DETERMINANTS OF EMPLOYEE ENGAGEMENT IN INDIAN IT SECTOR

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ABSTRACT
Employee engagement is a relatively new concept. The term employee engagement has attracted immense research interest over the past two decades. Consequently, extensive work has been made with respect to defining the term ‘employee engagement’ and differentiating it from pertinent constructs. Employee engagement does not mean employee happiness. Employee engagement shares a significant relationship with the employee productivity (Maitland, 2005). The current empirical study has been undertaken with an intention to understand the employee engagement practices in IT sector in Bangalore city. In order to realise the stated objectives, the researchers have identified seven important factors such as supervision, quality of working environment, the reliability of information, communication & quality of information, pay and benefits, appraisal process & level of satisfaction and organizational commitment. Towards this, a five point Likert’s scale has been constructed and administered as research instrument. The research instrument was pre tested before administering on the 250 respondents. The validity of the questionnaire was adjudged, using reliability statistics. Later a robust multiple regression has been run to identify the major drivers of employee engagement in IT sector. Regression results have revealed that Supervision (F1), Quality of Work Environment (F2), Reliability of information (F3), Appraisal Process and Level of Satisfaction (F6) and Organizational commitment (F7) are the major determinants of employee engagement. Based on the analysis of the study a brief summary of findings has been made and a meaningful conclusion has been drawn. Finally the results have been compared with the possible evidence.

Keywords: Employee engagement, Cronbach’s Alpha, Quality of working environment, Organizational loyalty, commitment.

INTRODUCTION
With rapid globalization and increased need to retain the talent pool, it is a challenge for the HR managers to engage employees in the organization. Employee Engagement has been given high prominence in the last two decades. The challenge is not only recruitment and retention to keep the employee happy or satisfied but also to keep the employee engaged to the assigned roles and tasks. In spite of conducting several empirical studies leading to the absence of a universal definition and concrete conceptualization, organizations have begun framing strategies for Employee Engagement. Schaufeli and Salanova (2007) have claimed that Employee Engagement is “essential” for contemporary organization to increase productivity considering the many challenges they face. Employment Engagement is the latest terminology that has gained lot of attention from practitioners and researchers. Macey et al. (2009), argued that organizations also gain a competitive edge through employee engagement. Considering the relevance of employee engagement and the deepening disengagement among employees more
frequently today, the focus is on how to promote employee engagement. Many have noted that there are numerous definitions for employee engagement and is beneficial for an organization’s performance. Employee Engagement has both psychological and behavioural facets and involves energy, enthusiasm and focused effort. According to Kahn (1990) the attachment and detachment of people depends on their caliber to perform the in an organization. The pursuit of understanding of “self-in-role” processes and the roles people occupy at work led Kahn (1990) in coining the term “engagement”. He opined that a different concept is needed to suit an employee in an organizational life, which is “ongoing, emotionally charged and psychologically complex” (Diamond and Allcorn (1985)). He termed these calibrations of self-in-role as personal engagement and disengagement, which means behaviour by which people bring in or leave out their personal selves during work role performances. Employee Engagement also involves aligning employees’ values, goals, and aspirations with that of the organization and is considered to be the best method for an organization to thrive. Engaged employees are not only committed but they are also passionate and proud. They have their own expectations from their future in the organization as well as that of the organization’s mission and goals. They are enthusiastic and always use their talents and discretionary effort to make a difference in their effort for sustainable and long term business success.

LITERATURE REVIEW

Review of previous literature provides a meaningful insight and background of a proposed study that already prevail or exist. Extensive empirical studies have been found in the literature on the proposed topic of employee engagement. According to Baumruk (2004) every organization wants to gain competitive advantage over others and employee engagement is the best tool for it. Indeed, employee engagement is considered to be the most critical factor to measure business energy and is conclusive factor for the success of any organisation. According to Young (2012) employee engagement is a very crucial issue for any organization, because it shares a significant relationship with individual, group, and organizational performance (Towers Perrin-ISR, (2006); Margaretha and Saragih (2008); Cameron (2005)) in areas such as productivity (Difeng Yu (2013); Simha and Vishnu Vardhan (2015)), retention (Schaufeli and Bakker (2004); Insync Surveys), turnover (Harter et al. (2002); Harmon, et al. (2003)); Morrison, et al. (2007); Buchanan (2004)), customer service and satisfaction (Vance (2006); Wagner & Harter (2006); Salanova et al. (2005); Frank et al., (2004); Coffman, (2000); Heintzman and Marson, (2005); Ellis and Sorensen, (2007)), customer loyalty (Ketter (2008); Gonring (2008); Haid & Sims (2009)) company reputation (Kemp et al. (2013); Rothbard (2001)) and overall stakeholder value (Swetha and Kumar). Despite the above employee engagement is a difficult concept to define, because many factors influence the concept of employee engagement in an organisation. Yet, numerous attempts have been made to define this complex term. In the literature, the term employee engagement (EE) was first conceptualized by the seminal work of Kahn (1990). According to Kahn (1990) employee engagement is more than simple job satisfaction and differs from basic job involvement. He argued that, the engaged employees exhibit high level of energy, enthusiasm about their work, and work with people and they are physically and mentally involved in their job for the benefit of the organization. Later many researchers tried to define the concept of employee engagement. For example the term, employee engagement is defined as the physical, emotional and psychological (commitment and involvement) attachment of the organisation members to their assigned job roles. Harter et al. (2002) define engagement as “the individual’s intellectual commitment and satisfaction as well as enthusiasm for assigned job”. According to Towers Perrin; Hewitt; Mercer employee engagement means “employees’ willingness, ability and motivation to contribute to organisation’s success”. Hay defines employee engagement as “Employees’ exertion of “discretionary effort and it’s not just meeting the standards of the assigned job”. Ruth Davidhizar and Ruth Shearer (1998) define the term engagement as “more
energy and commitment from the workers to organisation’s success”. Baumruk (2004) described employee engagement as emotional and intellectual commitment exhibited by the employees in their job. Truss et al., (2006) give a definition of employee engagement as “passion for work”. In the words of Lockwood (2007) “it is a degree to which an employee would be physically, emotionally and intellectually connected to the assigned roles of the organisation”. Thus, hardly any consensus have been arrived in the literature as to which of these definitions is more suitable in general, or suitable model of employee engagement in an organisational perspective.

The concept of employee engagement has been widely explored and investigated in the literature. For example, Shuck (2011); Jenkins and Delbridge 2013; James Harter et al. (2002); Maslach and Leiter (1997); David (2007); Schaufeli, et al. (2002); Keenoy (2013); Welbourne (2007); Luthan and Peterson (2002); McBain (2007); Shuck (2010), Due to its orientation towards practice, researchers have explored the theory of engagement in the workplace. (e.g., Arrowsmith & Parker, 2013; Francis et al., 2013; Jenkins & Delbridge, 2013; Reissner & Pagan, 2013; Townsend, Wilkinson, & Burgess, 2014; Truss et al., 2011) and tested (e.g., Alfes et al., 2013; Bakker & Xanthopoulou, 2013; Bhatnagar, 2012; Biswas, Varma, & Ramaswami, 2013; Cabrera, Collins, & Salgado, 2006; Juhdi, Pa’wan, & Hansaram, 2013; Rees, Alfes, & Gatenby, 2013; Salanova & Schaufeli, 2008; Shantz et al., 2013; Viljevac, Cooper-Thomas, & Saks, 2012; Yalabik et al., 2013).

The employee engagement has been discussed widely by HR professionals lately, because the concept is considered to be the most powerful scale to measure business energy. Therefore, the concept of employee engagement has been designated as the most sought after topic in human resources management in recent times.

The employee engagement has received a prominent attention in the literature with empirical studies being conducted on a wide variety of organisations such as health care (Love et al., (2008); (Brown 2002); Atkins, et al. (1996); Jimmy Peltier and Andy Dahl (2009); Huselid, (1995); NegwayaE.,et al. (2013), banking sector (Fatma Jaupi and Shyqyri Llaci (2015); Neeta Bhatla (2011); Ali Abbaas & Ikhas Ibrahim (2012); call center (Bond (2010)); offshoring industry (Thite (2010); Palugod & Palugod, (2011)); on civil servants (Kuper and Marmot (2003)), Hotel (Liel and Suliyanto (2012); Junghoon Lee (2012); Priyanka Anand (2011); Padmakumar and Gantasala (2011); Ala’a N. & Ahmad Puad (2013). IT sector (Harminder Kaur Gujral and Ishta Jain (2013)); (Saraha and Patrick (2011)), MNC HR practices in developing economies (Elaine Farndale at el. (2011)), sales professionals (Rabinya Sange and Srivasatava (2012)); automobiles (Neelam Lal et al. (2013)), professionals (Vishal and Kumar (2013), manufacturing sector (Muthuveloo, et al. (2013)), mining sector (Simon L. Albrecht (2012)), education (Iqbal Ahmed Hakeem and Sumaira Gulzar (2015)), telecom sector (Chughtai (2013)), BPO Industries (Thiagarajan and Renugadevi (2011)) etc.

Bulk of the studies in literature tried to investigate the factors that drive the employee engagement in an organisational setting. According to McBain (2007) organizational culture (openness, supportive attitudes) is the most important factor and this view was supported by (Saks 2006); Ram and Prabhakar (2011). However, Saks (2006); Ram and Prabhakar (2011); Sebastiaan R. & Coen W. (2013); Mona n. Moussa (2013), claim that reward and recognition systems in an organisation play a crucial role in employee engagement. Shuck (2010) claimed job fit, affective commitment and psychological climate were the vital factors for employee engagement. Vazirani (2005) argued that leadership style in an organisation plays a vital role in the employee engagement. The leadership style employed by the corporate executive would affect the attitude of the employee and in turn affect the employee engagement. Similar view was held by Watson, (2009); Padmakumar and Gantasala (2011); Bass and Avolio (1999); Suliman & Kathairi (2012); Robinson et al. (2004); (Stephenie Okerman). Studies done by Ram and Prabhakar (2011), Saks (2006) on employee engagement concluded that the engaged employees are more loyal to their organization. According to Forstenlechner (2009) the relationship between the senior management and the employees is a very crucial determinant
of the employee engagement (Ali (2010)). Shaikh Saeed Al Maktoum (2015) argued that employee empowerment is the key for employee engagement in any organisation (Saxena & AlHashmi (2010)). Findings from Ruth Davidhizar and Ruth Shearer, (1998) confirmed that through proper training and development employee engagement can be achieved (George (1997)). Neeta Bhatla (2011) argued that business organizations must give their employees the liberty to make their work exciting and an environment having an engaged work life. Even Thomas and Velthouse supported this view and they argued that meaning-less work is sharing a positive relationship with apathy and detachment from one’s works. According to Nitin, (2007) employee engagement is a barometer that determines the association of a person with the organization. Harter, Schmidt et al. (2002) and Gruman et al. (2011) argued that employee engagement shares positive relationship with various organisational performance indicators. According to Bakker et al., (2012) and De Clercq et al., (2010) engaged employees are more committed, more likely to stay with the organisation and likely to perform better than their peer groups. Several authors used the concept of employee engagement in synonym with commitment. For example, McCashland (1999); Bhogle and Bhogle, (2011); Meyer and Allen (1997); Saks (2006); Ali Syed Smitha (2013); Mc Cashland (1999); Mowday, Porter & Steers; (1982). Mowday, Porter & Steers (1982) were of the opinion that commitment has three important attributes namely; (i) identification with the main goals and core values of the organization; (ii) an eagerness to belong to those goals and values and (iii) readiness to exhibit effort in favour of the organisation.

According to Goddard, (1999) the phrase employee engagement means time spent on the job which should be quantified by the time spent on a job by an employee. Yet, another group of researchers for example, Glen (2006); Baumruk et al. (2006); Buhler, (2006); Frankiess (2008); Brigitte Kroon and Charissa Freese (2013) claim that employee engagement means retention of talents in an organisation. Frankiess (2008), Jyotsna Bhavnagar (2008) argue that the organization's talent management practices can decrease the attrition rates. Gaurav Bagga (2013) and Gallup (2009) support this view and argued that in order to retain the talents in the organisation, they must be able to see a well-defined career path ahead of them in the organisation (Beer et al. (1984); Pete Sanborn, Rahul Malhotra and Amy Atchison (2011)). Devi (2009) claims that in the case of service sector employee engagement and retention are key drivers of customer satisfaction and loyalty (Mita Mehta (2014)). However, Meganck (2007) claims that a positive social environment is the key factor for employee commitment. In an investigation by Shruti and Rashmi (2014) held the same view that the concept of employee engagement lies in the hands of the management. In an empirical study based on 2000 employee across England, it was found that communication was the key factor for employee engagement (CIPD 2009). Same view was observed in the empirical findings of Sarangi et al. (2012).

Given the importance of the concept of employee engagement to business organizations, coupled with the deepening disengagement among workers today, a crucial question is how to boost the engagement of the employees to the organisation. Even Jack Welch (2006) ranked employee engagement above the customer satisfaction and free cash flow. Because, the engaged employees express themselves physically, cognitively focused, emotionally attached during their role performances hence, a ‘satisfied’ employee is expected to intellectually and emotionally bind with the employer. According to Kohli & Grover, (2013) in India only eight percent of the employees are engaged in their workplace. Since the percentage of employee engagement to job in Indian context is startling, there is a need to conduct an empirical survey relating to this proposed topic. However, the empirical research on Indian context with regard to employee engagement has been relatively few as compared with western context. Apart from that, Robinson et al., (2004) argued that much of the data on employee engagement comes from HR consulting firms. There is a paucity of research on the proposed title in the academic literature. Even Joo and Mclean, (2006) argued that although lot of work has been done in the literature on employee engagement, yet it is an area where rigorous academic research is
required. Therefore, the current study entitled “DETERMINANTS OF EMPLOYEE ENGAGEMENT IN INDIAN IT SECTOR” has been undertaken to fill the gap. The structure of this empirical study is as follows. Section two provides a brief discussion of previous literature done with respect to the proposed title. Section three outlines the objectives of the study, sampling technique and the methodology employed for the study. Section four covers the empirical results and in the final section a brief discussion and conclusion has been drawn and the results are compared with the possible evidence.

RESEARCH DESIGN

OBJECTIVES OF THE STUDY
The current empirical study has been conducted with the following objectives:
1. To examine the influence of demographic factors such as age, gender, length of service, income, qualification and grade on individual factors of employee engagement.
2. To evaluate various chosen factors such as Supervision, Quality of working environment, Reliability of information, Communication, Pay and benefits, Appraisal process and Organizational commitment and its impact on employee engagement in IT sector in Bangalore city.
3. To offer suggestions based on this empirical study

THE RESEARCH INSTRUMENT
The literature has given a number factors to measure the employee engagement practices in an organisational context. However, there has been no consensus on the factors that influence the employee engagement and an instrument to measure the same. Based on the thorough literature, we have identified seven important factors namely, supervision, quality of working environment, reliability of information, communication, pay and benefits, appraisal process and organizational commitment. For every individual construct we have developed items using five point Likert’s scale. The objective of this model is to measure the major determinants of the employee engagement practices in IT sector. In order to realise the stated objectives we have developed items for each construct as follows: for factor one, supervision -seven items, for the second factor, quality of working environment - nine items, for third factor, reliability of information - three items, for fourth factor, communication - ten items, for fifth factor pay and benefits - seven items, for appraisal process - eight items and for the last factor organizational commitment - eight items.

SAMPLING
For the purpose of the study a snowball sample of 300 respondents from the various IT companies in Bangalore have been interviewed. Out of three hundred interviewed respondents only two hundred and fifty responses were retained for the purpose of final analysis. The sample comprises of employees from different levels of management.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td>.802</td>
<td>6</td>
</tr>
<tr>
<td>Quality of Working environment</td>
<td>.782</td>
<td>9</td>
</tr>
<tr>
<td>The reliability of information</td>
<td>.818</td>
<td>2</td>
</tr>
<tr>
<td>Communication and quality of information</td>
<td>.859</td>
<td>10</td>
</tr>
<tr>
<td>Pay and benefits</td>
<td>.845</td>
<td>7</td>
</tr>
<tr>
<td>Appraisal Process and Level of Satisfaction</td>
<td>.852</td>
<td>7</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>.780</td>
<td>6</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>.883</td>
<td>8</td>
</tr>
</tbody>
</table>
Cronbach’s alpha is the most widely used measure of internal consistency in the instrument when we use Likert’s scale questions in a questionnaire. Cronbach’s Alpha is expected to measure the internal consistency of the items. For the purpose of the study we have identified seven different variables (independent). In order to assess the reliability of the constructed instrument we have conducted a reliability statistics in SPSS for all the identified variables and they are presented in the above table. It is evident from the above table that since the Cronbach’s Alpha value is greater than 0.7 reliability was not a problem.

**PLAN OF ANALYSIS**

The collected data was collated by using SPSS software. While analysing the data we followed three major steps. Under step one, we tested the collected data’s internal consistency by applying reliability statistics. For this purpose the instrument’s reliability was adjudged by employing Cronbach’s alpha. The threshold Cronbach’s alpha value fixed for this purpose was 0.7. Only those items whose Cronbach’s alpha value was greater than .7 was retained for further analysis. In our analysis the alpha value ranged from 0.780 to 0.913. Later various assumptions of the model have been tested. For this purpose various tests like normality assumption (this was investigated by framing histograms) and outliers have been eliminated by employing box plots. To get rid of multicollinearity, we ran multicollinearity diagnostics. In the second phase frequency table and cross tabulation was run and later Chi square test was employed to arrive at the meaningful statistical inference. In the last phase, multiple linear regression was run to identify the major determinates of employee engagement in Indian IT sector. Based on the analysis a brief summary of findings have been framed and a scheme of suggestions have been offered. In the last phase, a meaningful conclusion was drawn and the results were compared with the possible evidence.

**DATA ANALYSIS**

In order to realize the stated objectives, various statistical tools have been employed. First, respondents’ demographic factors have been presented in the following table.

**TABLE No. 4.1: DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>No of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>138</td>
<td>55.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>112</td>
<td>44.8</td>
</tr>
<tr>
<td>Age</td>
<td>Below 30</td>
<td>199</td>
<td>79.6</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>48</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>51 and above</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Annual Household</td>
<td>&lt; Rs. 3,00,000 per annum</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Income</td>
<td>Rs. 3,00,001-5,00,000 per annum</td>
<td>72</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td>Rs. 5,00,001-7,50,000 per annum</td>
<td>73</td>
<td>29.2</td>
</tr>
<tr>
<td></td>
<td>Rs. 7,50,001-10,00,000 per annum</td>
<td>44</td>
<td>17.6</td>
</tr>
<tr>
<td></td>
<td>&gt; Rs. 10,00,000 per annum</td>
<td>59</td>
<td>23.6</td>
</tr>
<tr>
<td>Length of service</td>
<td>Below 3 Years</td>
<td>147</td>
<td>58.8</td>
</tr>
<tr>
<td></td>
<td>3-5 Years</td>
<td>64</td>
<td>25.6</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>29</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>Above 10 years</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>Qualification</td>
<td>Diploma</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>49</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>188</td>
<td>75.2</td>
</tr>
<tr>
<td></td>
<td>Professional</td>
<td>10</td>
<td>4.0</td>
</tr>
</tbody>
</table>
It is clear from the above table No. 4.1 that 55.2 percent of the respondents were male (138) and 44.8 percent of the respondents were female (112). The number of male respondents were slightly more than the number of female respondents. Out of 250 respondents interviewed, 199 respondents belonged to age group below 30 and 48 respondents belonged to age group 31-40. This indicates that major chunk of the respondents belong to the age group below 30 (79.6 percent).

Out of 250 responses collected from various respondents, 29.2 percent respondents have a annual household income of between 5 lakh to 10 lakh, followed by 28.8 percent had an annual household income between Rs. 5,00,001- Rs. 7,50,000 per annum. 23.6 percent had an annual household income more than 10, 00,000. However, 17.6 percent of the respondents claimed that they had an annual household income between Rs. 7, 50,001- Rs. 10, 00,000 per annum. Majority of the respondents (58.8 percent) have been serving the current organization for less than three years followed by 25.6 percent of the respondents (64) have been serving the current organization for 3-5 years. However, another 11.6 percent of the respondents serving the current organization between 5 – 10 years. This signifies that a major bunch of the respondents have been serving the current organization for less than three years.

Out of 250 respondents interviewed, 75.2 percent have done their masters, followed by 49 percent with degree. 4 percent of the respondents have done their professional courses and only 1.2 percent of the respondents have done their diploma. This indicates that majority of the respondents have done their masters.

Out of 250 respondents interviewed, 48.4 percent of them were working as junior level and 26.8 percent as assistant managers. However, 12.8 percent were senior managers and balance 12 percent were team leaders.

The aim of the researcher under this section is to find out the demographic factors (gender, age, annual household income, qualification, grade and length of service) and its influence on the various factors chosen for the purpose of the study such as supervision, quality of working environment, the reliability of information, communication and quality of information, pay and benefits, appraisal process and level of satisfaction, organizational commitment and overall satisfaction. In order to realise the stated objectives the researchers have employed Pearson’s Chi square test to prove or disprove the hypothesis. The results of the Pearson’s Chi square test have been presented in the following table No. 4.2:

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Chi Square Value</th>
<th>P value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>Factor 1 (Supervision)</td>
<td>204.492</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 2 (QWE)</td>
<td>220.122</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 3 (Reliability)</td>
<td>60.374</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 4 (Communication)</td>
<td>230.569</td>
<td>.002</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 5 (Pay and Benefits)</td>
<td>183.940</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 6 (Appraisal)</td>
<td>268.548</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 7 (Commitment)</td>
<td>170.574</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Income</td>
<td>Factor 8 (Overall)</td>
<td>312.853</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Gender</td>
<td>Factor 1 (Supervision)</td>
<td>33.777</td>
<td>.009</td>
<td>Reject</td>
</tr>
<tr>
<td>Gender</td>
<td>Factor 2 (QWE)</td>
<td>52.259</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>
It is clear from the above table that the we have rejected the Null hypothesis between the demographic factor - income and factor one- supervision (Chi square value of 204.492 with a p value of .000), quality of working environment (Chi square value of 220.122 with a p value of .000), the reliability of information (Chi square value of 60.374 with a p value of .000), communication and quality of information (Chi square value of 230.569 with a p value of .000), pay and benefits (Chi square value of 183.940 with a p value of .000), appraisal process and level of satisfaction (Chi square value of 268.548 with a p value of .000), organizational commitment (Chi square value of 170.574 with a p value of .000) and overall satisfaction (Chi square value of 312.853 with a p value of .000).

We have rejected the Null hypothesis between the demographic factor - gender and factor one - supervision (Chi square value of 33.777 with a p value of .009), quality of working environment (Chi square value of 52.259 with a p value of .000), the reliability of information (Chi square value of 17.102 with a p value of .000), communication and quality of information (Chi square value of 76.180 with a p value of .000), pay and benefits (Chi square value of 74.279 with a p value of .000), appraisal process and level of satisfaction (Chi square value of 95.256 with a p value of .000), organizational commitment (Chi square value of 43.092 with a p value of .001) and overall satisfaction (Chi square value of 81.533 with a p value of .000).

We have rejected the Null hypothesis between the demographic factor - qualification and factor one - supervision (Chi square value of 113.829 with a p value of .000), the reliability of information (Chi square value of 28.948 with a p value of .000), communication and quality of information (Chi square value of 76.180 with a p value of .000), pay and benefits (Chi square value of 74.279 with a p value of .000), appraisal process and level of satisfaction (Chi square value of 95.256 with a p value of .000), organizational commitment (Chi square value of 43.092 with a p value of .001) and overall satisfaction (Chi square value of 81.533 with a p value of .000).
of information (Chi square value of 155.379 with a p value of .000), pay and benefits (Chi square value of 159.124 with a p value of .000), appraisal process and level of satisfaction (Chi square value of 161.621 with a p value of .000), organizational commitment (Chi square value of 275.721 with a p value of .000) and overall satisfaction (Chi square value of 278.750 with a p value of .000). However, in case of quality of working environment we have accepted the null hypothesis (Chi square value of 134.176 with a p value of .222).

We have rejected the Null hypothesis between the demographic factor - age and factor one - supervision (Chi square value of 70.928 with a p value of .034), quality of working environment (Chi square value of 128.938 with a p value of .000), the reliability of information (Chi square value of 48.766 with a p value of .002), communication and quality of information (Chi square value of 97.252 with a p value of .014), pay and benefits (Chi square value of 95.136 with a p value of .006), appraisal process and level of satisfaction (Chi square value of 95.057 with a p value of .003) and overall satisfaction (Chi square value of 99.711 with a p value of .005).

However, for organizational commitment we accepted the null hypothesis with a Chi square value of 53.135 with a p value of .508.

We have rejected the Null hypothesis between the demographic factor - length of service and factor one - supervision (Chi square value of 129.889 with a p value of .000), quality of working environment (Chi square value of 184.169 with a p value of .000), the reliability of information (Chi square value of 100.812 with a p value of .000), communication and quality of information (Chi square value of 281.519, with a p value of .000), pay and benefits (Chi square value of 171.098 with a p value of .000), appraisal process and level of satisfaction (Chi square value of 235.436 with a p value of .000), organizational commitment (Chi square value of 162.921 with a p value of .000) and overall satisfaction (Chi square value of 196.622 with a p value of .000).

In order to investigate the most prominent factors and its impact on the overall employee engagement, a multiple regression model was developed. The Following multiple regression equation has been used to test the theoretical relationship between the overall job satisfaction as perceived by the respondents with various identified factors such as supervision, quality of working environment, the reliability of information, communication and quality of information, pay and benefits, appraisal process and level of satisfaction and organizational commitment.

\[ Y (Employee\ engagement) = a + b_1 X_1 (supervision) + b_2 X_2 (quality\ of\ working\ environment) + b_3 X_3 (reliability\ of\ information) + b_4 X_4 (pay\ and\ benefits) + b_5 X_5 (communication) + b_6 X_6 (appraisal\ process) + b_7 X_7 (organizational\ commitment) + \epsilon \] 

Where, 

\[ Y = (Employee\ engagement) \]
\[ X \text{ is the vector of explanatory variables in the estimation model} \]

\[ X_1 = Supervision \]
\[ X_2 = Quality\ of\ working\ environment \]
\[ X_3 = Reliability\ of\ information \]
\[ X_4 = Communication \]
\[ X_5 = Pay\ and\ benefits \]
\[ X_6 = Appraisal\ process \]
\[ X_7 = Organizational\ commitment \]
\[ a = constant\ intercept\ term\ of\ the\ model \]
\[ b = coefficients\ of\ the\ estimated\ model \]
\[ \epsilon = error\ component \]
TABLE No. 4.3: TABLE SHOWING REGRESSION RESULTS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.097</td>
<td>1.276</td>
<td>3.996</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Supervision</td>
<td>.125</td>
<td>.064</td>
<td>.082</td>
<td>1.972</td>
<td>.049</td>
</tr>
<tr>
<td>Quality of WE</td>
<td>.160</td>
<td>.052</td>
<td>.141</td>
<td>3.051</td>
<td>.003</td>
</tr>
<tr>
<td>Reliability</td>
<td>.479</td>
<td>.156</td>
<td>.117</td>
<td>3.068</td>
<td>.002</td>
</tr>
<tr>
<td>Communication</td>
<td>.023</td>
<td>.049</td>
<td>.022</td>
<td>.472</td>
<td>.638</td>
</tr>
<tr>
<td>Pay &amp; benefits</td>
<td>.062</td>
<td>.049</td>
<td>.055</td>
<td>1.250</td>
<td>.213</td>
</tr>
<tr>
<td>Appraisal</td>
<td>.309</td>
<td>.056</td>
<td>.291</td>
<td>5.532</td>
<td>.000</td>
</tr>
<tr>
<td>Commitment</td>
<td>.901</td>
<td>.069</td>
<td>.596</td>
<td>13.026</td>
<td>.000</td>
</tr>
</tbody>
</table>

TABLE No. 4.4 MODEL SUMMARY

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.896</td>
<td>.803</td>
<td>.797</td>
<td>2.49081</td>
<td>2.233</td>
</tr>
</tbody>
</table>

TABLE No. 4.5 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>6114.235</td>
<td>7</td>
<td>873.462</td>
<td>140.787</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1501.401</td>
<td>242</td>
<td>6.204</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7615.636</td>
<td>249</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Intercept is α in the set equation. Standard error measures the variability in approximation of the coefficient and lower standard error means coefficient is closer to the true value of the coefficient. It is evident from the results shown in the above table No. 4.3 that Supervision (F1), Quality of Work Environment (F2), Reliability of information (F3), Appraisal Process and Level of Satisfaction (F6) and Organizational commitment (F7) are statistically significant at 5% level of significance. However, Communication & quality of information (F5) and pay & benefits (F6) were not statistically significant.

It is evident from table No. 4.4 the R-square value of .896 (with an adjusted R² of .797) indicating that 89.6% of the information of dependent variable (employee engagement) is predicted by the model. However, in all, Supervision (F1), Quality of Work Environment (F2), Reliability of information (F3), Appraisal Process and Level of Satisfaction (F6) and Organizational commitment (F7) were statistically significant. F test indicates the fitness of the model that is, the results help us to understand whether the regression model as a whole has significant predictive capability. The above table (ANOVA) shows that the model is statistically significant with F value (140.787) at a significance level of .000. R² appears just right, indicating the existence of omitted variables. With regard to collinearity statistics, VIF values range between 1.788 to 3.397 indicating that multi-collinearity among independent variables were not a problem for regression. The Durbin-Watson test statistics was also within the tolerable range of 2.233.
DISCUSSION AND CONCLUSION
The current empirical study entitled “the determinants of employee engagement in IT sector” has been undertaken to investigate the extent to which the various chosen factors influence the employee engagement in IT Sector, Bangalore City. In order to realised the stated objectives the researchers have identified seven important factors such as supervision, quality of working environment, the reliability of information, communication & quality of information, pay & benefits, appraisal process & level of satisfaction and organizational commitment. A five point Likert’s scale has been constructed and administered as research instrument which was pre-tested before administering on the respondents. The validity of the questionnaire was adjudged using reliability statistics, Cronbach’s alpha coefficient (α). Cronbach's coefficient, having a value of more than 0.7 is considered adequate for such exploratory work. The values of α in this study for the various questions were found to be .831, .746, .940, .764, .950, .768, .886, .898, .871 etc. It implies that there is a high degree of internal consistency in the responses to the questionnaire. The study revealed the following major research findings. 55.2 percent of the respondents were male and 44.8 percent of the respondents were female. Out of 250 respondents interviewed, 199 respondents belong to age group below 30 and 48 respondents belong to age group 31-40. 29.2 percent respondents have an annual household income between 5 lakhs to 10 lakhs, followed by 28.8 percent have an annual household income between Rs. 5,00,001- Rs. 7,50,000 per annum. Majority of the respondents (58.8 percent) have been serving the current organization for less than three years and 25.6 percent of the respondents have been serving in the current organization for 3-5 years. Out of 250 respondents interviewed, 75.2 percent have done their masters, followed by 49 percent with degree. 48.4 percent were working as junior level and 26.8 percent as assistant managers among the 250 respondents.

Researchers have rejected the null hypothesis between the demographic factor -income and F1 (supervision), F2 (quality of working environment), F3 (the reliability of information), F4 (communication and quality of information), F5 (pay and benefits), F6 (appraisal process and level of satisfaction), F7 (organizational commitment) and overall satisfaction. However, in case of gender once again we failed to accept the null hypothesis with F1, F2, F3, F4, F5, F6, F7 and overall satisfaction. This indicates that there exists a significant relationship between income and gender of the respondents and chosen factors. With respect to qualification of the respondents we have rejected the Null hypothesis in case of F1, F3, F4, F5, F6, F7 and overall satisfaction. However, in case of quality of working environment (F2) we have accepted the null hypothesis. This indicates that there exists a significant relationship between qualification of the respondents and chosen factors for the purpose of the study except for working environment. We have rejected the Null hypothesis between the factor - age and F1, F2, F3, F4, F5, F6 and overall satisfaction. However, for (F7) organizational commitment we accept the null hypothesis. With regard to length of service in the current organisation we have rejected the null hypothesis in case of F1, F2, F3, F4, F5, F6, F7 and overall satisfaction.

Multiple regression results revealed that Supervision (F1), Quality of Work Environment (F2), Reliability of information (F3), Appraisal Process and Level of Satisfaction (F6) and Organizational commitment (F7) are the major determinants of employee engagement in an organisational set up. However, Communication & quality of information (F5) and pay & benefits (F6) were not statistically significant. All the chosen variables were sharing direct relationship with the employee engagement practices. When we ranked the standardised coefficients of the chosen variables, organisational commitment stood first with 0.464 weight, followed by appraisal system with 0.226 weight, quality of working environment with 0.109 weight, reliability with 0.0912 weight, supervision with 0.0639 weight, pay and benefits with 0.042 weight and communication with 0.017 weight. This highlights the prominent variables that play a crucial role in the employee engagement practices in IT sector.

Commitment is the major driver for the employee engagement. The first item (I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be
successful) stood highest with a mean score of 3.78 and with a second lowest standard deviation of .790 followed by the last item (I am extremely glad that I chose this organization to work for over others) with the mean score of 3.64 with a standard deviation of 0.867. However, the highest standard deviation recorded was for the fifth item in the list (The work I do is very important to me) 1.176. The second important factor was appraisal system with a weight of 0.226. In this factor, item number 3 (My supervisor has supported my development plan) stood highest with a mean score of 3.49 and with the lowest standard deviation of 0.798 followed by items 1 and 2 with the mean score of 3.42 respectively and .824 and .828 standard deviation. However, item 7 stood with a mean score of 3.24 and the highest standard deviation of 1.090 and item 4 with a standard deviation of 1.056 respectively (high degree of variation in one on one appraisal with manager). The next prominent factor was working environment with a weight of 0.109. The first item (I know what is expected of me at work) stood with the highest mean of 4.18 with a standard deviation of .731 followed by item 6 (his or her opinion matters) and item 2 (I have the adequate resources to carry out the assigned task) with a mean score of 3.92 and 3.91 respectively and .738 and .866 standard deviation. However, item 8 (flexibility for personal needs) stood with a mean score of 3.52 with the highest standard deviation of 1.162. The next prominent variable was reliability factor. It had a weight score of 0.0912. In this case, the item one (information received from management is reliable) stood first with a mean score of 3.55 and with a standard deviation of .786 followed by item 2 (reliability of information from co-workers) with a mean score of 3.42 (standard deviation .804). However, the factor supervision came fourth with a weight of 0.0639. Item number one (your superior makes you feel free to talk with him/her) stood first with the mean score of 4.17 and standard deviation of .617 and item 3 (Your superior expresses his/her confidence with your ability to perform the job) with a mean score of 3.99 (standard deviation being .845). However, item 7 (Your superior is frank and candid with you) stood last with the mean score of 3.16 with a standard deviation of .966.

The factor pay and benefits had a weight score of 0.0429 and stood sixth in the list. In this case item 6 (rewarding and praising good performance) stood highest with a mean score of 3.41 with a standard deviation of .893 and item 2 (I feel secure from layoffs) with a mean score of 3.37 and standard deviation of 1.061 (the highest standard deviation). Based on weights assigned to the factors, factor 4 (communication and quality of information) stood last. Under communication factor, item one had a mean score of 3.84 (Communications are good within my department) with a standard deviation of .681 stood first followed by item 6 (respondents are kept informed about how well organizational goals and objectives are being met) with a mean score of 3.80 (.710 standard deviation), item 7 (meetings are held frequently) with a mean score of 3.69 (with a standard deviation of .917) and item four (The mission of the company is updated using employee input) had recorded the highest standard deviation .939 with a mean score of 3.17.

Following subsections outline the findings obtained from the analysis expressed in terms of the signs and statistical significance of the coefficients for the selected seven independent variables and focuses on their associations with employee engagement (dependent variable).

Organisation commitment: The majority of the respondents felt that they were willing to put in a great deal of effort, beyond the normally expected, in order to help the organisation be successful. They also felt that the job activities were personally meaningful to them and they would like to endorse the current organization with their friends as a great organization to work for. However, there is a high degree of variation in Item 5, that is, ‘The work I do is very important for me’ followed by feeling very little loyalty for the current organization they are working for. This inconsistency reveals that although they are engaged to their jobs they are not loyal to their organisations. All organisations face employee grievance, personal or professional at some point or the other. To encounter this, the organisation must build a trustworthy environment wherein the employees can rely on suggestions or solutions to their grievances without compromising on privacy. The managers must be able to recognise the
intricacies of mutual impact of personal and professional life. Eliminating this barrier is a major driver of employee engagement. These outcomes have been supported by the studies of Harminder Kaur & Isha Jain (2013). Similar results were reported by Tauseef Ahmad (2013). In his study he found a strong relationship between employee engagement and turnover intentions.

**Appraisal system:** Majority of the respondents were of the opinion that their supervisors have supported their development plan in the organisation. Apart from that, they were happy with the feedback they were receiving about their assigned task and even the tone of their appraisal was appropriate. They also felt there was a scope for advancement in the company and they were happy with the one on one interactions with their reporting managers. However, there is a great deal of variation in item four (One on one with the managers). Majority of the respondents felt that their intention to remain in the company for the next two years was uncertain. Therefore, it is advised for the managers that the one on one meetings must be done with good objectives and must address all relevant problems and prospects. Similar findings were documented by Padmakumar Ram & Gantasala (2011)

**Quality of working environment:** Survey revealed that the respondents had a total clarity about the task assigned to them and they also felt that their opinions about the task mattered. They felt that they were provided with the right resources to execute the assigned task. They had the liberty to do what they thought was best and they were of the opinion that they have had enough opportunities at work to learn and grow. However, they were not happy with the flexibility for their personal time and family needs with their job. Another alarming development was the discontentment with the recognition given by the managers for performing the assigned task. In order to counter this situation, the employees must be allowed to balance their personal and professional life. Also, the managers must recognise the need for improved appraisal and motivation. A study by Balakrishnan et al. (2013); (Derara Tessema (2014)); Dale Carnegie Training White Paper (2012); Gallup Employee Engagement Survey (2010) found a similar evidence with recognition and manager/supervisor support or relationship variables.

**Reliability of information:** Majority of the respondents felt that the information received from the top management and their co-workers was reliable.

**Superior:** Major chunk of the respondents felt that their superiors made them comfortable while sharing job related issues. The managers also expressed their confidence with the ability of the respondents while performing an assigned task. Majority of the respondents felt that their superior had the right competency and expertise to guide them. However, majority of the respondents felt their superior was not frank and candid while dealing with them and few of the respondents doubted the ability and expertise of their managers to guide them.

**Pay and benefits:** The findings of the study throw light on the following lacuna under pay and benefits factor. Majority of the respondents felt that the rewarding system in the organisation was satisfactory. They also felt secure from lay off. They felt that the compensation program encourages them to work efficiently and that their compensation is competitive and comparable with industry standards. However, the respondents felt a little concerned about the layoff practises of the organisation and a majority of the respondents disagreed with the compensation practices of the organisation. A significant portion of the respondents were not satisfied with the promotional policies of the organisation. Even findings of a study conducted by BlessingWhite research (2013) supported this view specially from the Indian perspective.

**Communication:** The findings of the study revealed that communication flow in the organisation seemed to be good. Majority of the respondents felt that they were kept informed about how effectively the organisational goals were being met. They felt that the channel of relevant information was what they preferred. They opined that the team meetings were held frequently and conducted smoothly. However, majority of the respondents expressed dissatisfaction about their participation in updating the mission statement of the company. There was also a high degree of variation in the frequency of team meetings.
The empirical findings of the study confirm that firms’ leadership, rewards, recognition (Arup Barman & Roy Saikat 2011), superior and subordinate relationship, flexibility for personal and family needs (Naval Garg 2014), clarity of information (Arti Chandani et al. 2016), proper compensation management (Hammad Alshammari 2015), transparent promotional policies, periodic one on one meetings, addressing the employees’ grievance, consistency in appraisal mechanisms are the major drivers of employee engagement in IT companies. Based on the above summary of empirical findings we can offer the following recommendations.

1) The organisation must follow democratic leadership wherein the employees must be free to express their opinion and feel that their opinions matter. The organisation must also engage in participative management.

2) A well planned incentive system will eliminate uncertainty in the minds of employees. As far as possible compensation system and promotional policies should be made transparent and it should be integrated in the policy manual. Management should communicate their lay off policy well in advance to eliminate any uncertainty and concern expressed by the employees about the lay-off policy of the organisation.

3) It is advisable to the top management or supervisors to recognise quality work done by the employees. Timely recognition and rewards are the major employee engagement drivers.

4) The major concern of the employees was that the superiors were not frank and candid with them in spite of supporting their development plan and motivating them. Therefore, the organisation must work towards reducing such apprehensions in the minds of employees and promote an open environment.

5) Since there is an increase in the demand for professional time, most of the employees felt that there is very little time for their personal life which in turn is affecting their professional work quality. Therefore, it is necessary to support employees in finding their professional and personal life balance and fulfil the gap as it is perceived to be one of the major drivers of employee engagement in the IT sector.

6) Majority of the respondents felt that the one-on-one meetings failed to meet certain objectives. They also felt that the meetings were more of a routine without achieving results. Hence, there is a need to clearly define the agenda of the meetings and use effective communication channels to convey the outcomes of the meetings as well as appreciate the work done by employees.

7) Any organisation can face employee grievance, personal or professional. To encounter this, the organisation must build a trustworthy environment wherein the employees can rely on suggestions or solutions to their grievances without compromising on privacy. Managers must be able to recognise the impact of personal life on professional life and vice versa. Understanding the intricacies of work-life conflict is a major driver of employee engagement.

8) The scale of performance appraisal must be consistent without any variations. The appraisal system must be fair and transparent which must be clearly communicated to the employees. The rewards and compensation management must also adhere to the performance appraisal. This consistency is an important driver of employee engagement.

In the background of the current empirical study, the researchers have identified the following areas for future research which can be carried in the field of employee engagement. First, the current study was conducted only on a sample size of 250 and was confined to IT sector and geographical limits of Bangalore city. Hence, the results obtained may not be pertinent to the country as a whole. Therefore, it is recommended to conduct an extended study of this kind encompassing more number of cities or geographies and other sectors (to capture to cultural differences across regions) and larger sample size may be taken up. Furthermore, the best possible indicator of employee engagement in any organization is intention to stay or continue to work for the current organization for at least a few more years. Therefore, further studies should take this one as a dependent variable and employee engagement as a mediating variable between the independent and dependent variables (identified seven dimensions). It is strongly
suggested to specifically identify intrinsic and extrinsic factors and its impact on employee engagement. More broadly, additional work is needed to understand intrinsic and extrinsic factors that influence and promote employee engagement in a firm or a sector.

References


