

## AN ANALYSIS OF THE EMPLOYEE ENGAGEMENT PRACTICES IN STATE BANK OF INDIA, RAIPUR REGION, CHHATTISGARH

## **ROOPENDRA SINGH<sup>1</sup> and RASHMI VAISHYA<sup>2</sup>**

Research Scholar<sup>1</sup> Assistant Professor<sup>2</sup> MATS School of Management Studies and Research MATS University, Raipur

#### Abstract

The success and growth of an organization is dependent on the level of employees' performance. The performance of the employees is determined by the level of employees' engagement. Engagement has the potential to significantly affect Employee Retention, Productivity, and loyalty. The study attempts to identify the predictors of Employee Engagement and investigate its level among the employees of State Bank of India falling in Non Managerial Executive cadre, with special reference to Raipur region of Chhattisgarh state situated in Central India. The research is based on the primary data collected from 104 employees on multiple dimensions related to Employee Engagement and its drivers. The research showed that the level of employee engagement in the organization is dependent on seven Factors namely Employee Job satisfaction, employee pay and financial benefits, employee sustainability and career progression, employees job profile, working environment and organization culture. Further, the association of demographic factors with employees are more driven by the career progression and better job opportunities, the female employees are more inclined towards stability and sustainability in job.

## 1. Introduction

Employee engagement is a comprehensive construct referred to as workplace approach which is designed on the basis of individual's psychological condition, traits, behaviours, outcomes and commitment towards the organization's goals and values. Drivers are the elements formed or initiated by the Human Resources Department to increase the employee satisfaction and further their level of engagement. It is a

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constructive outlook held by the employees towards the organization and its values that measures an employee's emotional commitment to job and their efforts to be deeply involved and invested in work. As defined by Kahn (1990) Employee Engagement is the act of harnessing the work roles by organization's members. As defined by Gallup research group the employee engagement is an individual's involvement and his/her satisfaction with work, as well as one's enthusiasm for it (Harter, 2002). The research has found that employers now become conscious and are focusing on employee engagement to create more productive and efficient workforce .Therefore, at large the organization should take the responsibility of creating an environment and a culture which conducive to this partnership. The main purpose of this research work was to determine Employee Engagement level among the non-managerial executive cadre employees working in State Bank of India in Raipur Region. The Bank provides state-of-the-art, widespread solutions for core banking system, corporate banking, insurance services and wealth and asset management. This research paper also attempts to identify the constructs of Employee Engagement.

## 2. Literature Review

In service sector, banking has been a flourishing industry which requires a pool of engaged manpower who can work with efficiency operating to take up the growing business. Employees are the most significant contributors to any business and its drivers should be selected to create an engaged work force for the organization. The process of engagement involves a positive cycle of perceptions of work, satisfaction with work, involvement and engagement with work. Engaged employees who are being more contented to their job, as compared to the less engaged employees develop better solutions, and are socially connected with their work. One must work on the improvement of employees to build up the connection with human resources to design a right measure to determine the feeling of the employee towards the organization and their intent to stay in the organization. Employers always look forward for people usually passionate about their job. Individual constructs such as career development and sustainability, pay and financial benefits, personality of the employee, employee working environment and stressor work under pressure influences engagement. Engaged iob

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employees' are an asset to the organization and always results in higher productivity, customer satisfaction, innovation in organization and quality which influences their retention in organization. The findings of studies have further refined its definition to include a three-dimensional concept of work engagement (May, Gilson, and Harter 2004). The three factors include a physical component, an emotional component and a cognitive component. Most often it has been defined as emotional and intellectual commitment of the employee to the organization (Baumruk, 2004; Richman, 2006; Shaw, 2005) or the amount of discretionary effort exhibited by employees in their jobs (Frank et al.2004). There exists a distinction between satisfaction and engagement as satisfaction portrays a basic level of contentment which describes what gets employees to show up for work viz. whether they can do the job or not, satisfied with their pay, likeness about work environment, but in terms of discretionary effort they have no desire to go the extra mile (Melcrum Publishing, 2005). Employee engagement predicts employee outcomes, organizational success, and financial performance (Bates, 2004; Baumruk, 2004; Harter et al., 2002 and Richman, 2006). However, it has also been reported that employee engagement is on the decline and there is a deepening disengagement among employees today (Richman, 2006; Bates, 2004). According to a study on the level of engagement among employees in America about half of all Americans in the workforce, are not fully engaged or they are disengaged, leading to what has been referred to as an engagement gap (Bates, 2004; Johnson, 2011 and Kowalski, 2003). One of the most popular and accepted approaches in this area comes from the Gallup Organization (Harter, Schmidt and Keyes 2003; Harter and Schmidt 2008). Results of this work have led to a 12-item Gallup Workplace Audit. Various researchers have different views regarding engagement of employees in the work place. Its more related to the retention of employees in an organization. The success and growth of an organization is dependent on the employees performance and the employees performance is dependent on the level of employees engagement and its constructs.

## 3. Justification of the Study

The banking sector is deemed to be a primary sector for the economy. It is the lifeblood of economic activity from collection of deposits to providing

credits. This sector plays the leading role in planning and implementing the financial policies which contribute in the national economic system and also work forward in improvisation of overall economy in order to satisfy the social needs of countrymen. For banking industry, the management should design their policies after considering the effect of different variables and employee preferences to keep them engaged. With a legacy of more than 200 years, State Bank of India (SBI) traces its ancestry from Bank of Calcutta which was founded in 1806 and is considered to be the oldest commercial bank in the national (Indian) subcontinent. Prior to mega merger announcement of ten public sector banks by the Finance Minister, five Associate Banks (State Bank of Bikaner & Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore) and Bharatiya Mahila Bank were merged on 01 April 2017. This is the first ever large scale consolidation in the Indian Banking Industry. The study tries to identify the drivers of employee engagement after the merger of five associates of State Bank of India in the capital city Raipur of the young state Chhattisgarh.

## 4. Research Objectives

On the basis of literature review and past work in the field of employee engagement, the following objectives and hypothesis are framed for the study:

4.1. To study and identify the construct and constituents of employee engagement in State Bank of India.

4.2 To analyze the effect of demographic factors on employee engagement in State Bank of India.

In order to accomplish the research objectives, Null Hypothesis and alternate hypothesis formed on the basis of above discussions:

Hypothesis 01 The drivers identified will not predict employee engagement.

Hypothesis 11 The drivers identified will predict employee engagement.

- Hypothesis 02 The drivers of employee engagement are independent of demographic factors.
- Hypothesis 12 The drivers of employee engagement are dependent on

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demographic factors.

## 5. Research Methodology

The study is an exploratory research which determines the level of employee engagement and identifies the key constructs of Employee Engagement among the Non-Managerial executive level employees of State Bank of India in Raipur region. Given the exploratory type of the research, the survey method approach was adopted for investigation, which involved a self-reporting questionnaire and possible secondary sources. The study had been conducted during 2018-2019 in the State Bank of India in Raipur region. As per the requirement for operationalizing the constructs other established instruments were consulted.

The population consisted of 388 employees belonging to fifty-five Branches of SBI in Raipur region. The present study is restricted to the Non managerial executive level employees such as clerks, associates, cashiers and accountants as they are in direct touch with the customers and represents the Bank to the customers. They account for 80 to 90 percent of total employees in selected region under study. The sample (104) consisted of almost one-third of selected population (300). As Simple Random Sampling from a finite population gives equal chance to each possible sample combination of being picked up from a finite population and an equal chance to each item in the entire population of being included in the sample. This applies without replacement sampling, i.e., once an item is selected for the sample, it cannot be replaced (Kothari, 2016).

In designing the questionnaire, a 5-point Likert scale (strongly disagree coded as 1, disagree coded as 2, undecided coded as 3, agree coded as 4 and strongly agree coded as 5) was used. The format and content of the questionnaire were pre-tested and validated using employees familiar with this issue. A pilot study was conducted on 47 employees with experts on the research field. The questionnaire has two parts:

**Part 1.** It consisted of 8 questions on respondents' basic information like Gender, age, Educational qualification, marital status and number of children, type of family, Income level and tenure of employment in same

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branch. Name of respondents was excluded from questionnaire to maintain confidentiality of respondents.

**Part 2.** It consists of 27 questions on drivers of Employee Engagement such as Job Satisfaction, Pay and benefits, Work Environment, Job Profile, Career progression, Leadership and Organisation culture (Datta, 2017).

Data was collected through primary source by administering the specially designed research instrument to a sample of 104 employees selected through simple random sampling. At least 2-3 employees were selected from each branch .The response rate was 100% despite being the busy schedule of the branches. The respondents were approached personally by the researcher to guide them through the questionnaire.

Quantitative data analysis has been done with the help of the following statistical tools:

- Exploratory Factor Analysis
- Confirmatory Factor Analysis
- Mann Whitney Test
- Kruskal Wallis Test

## 6. Results and findings

#### 6.1. Percentage Analysis

Age of Respondent								
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	< 25 years	11	10.6	10.6	10.6			
	26years-30years	37	35.6	35.6	46.2			
	31 years to 35 years	39	37.5	37.5	83.7			
	>36 years	17	16.3	16.3	100.0			
	Total	104	100.0	100.0				

## Table1. Frequency and Percentage: Age.

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Gender of Respondent								
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Male	58	55.8	55.8	55.8			
	Female	46	44.2	44.2	100.0			
	Total	104	100.0	100.0				

Table 2. Frequency and Percentage: Gender.

**Table 3.** Frequency and Percentage: Qualification.

Quali	Qualification of respondent								
		Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	Graduate	76	73.1	73.1	73.1				
	Post graduate	28	26.9	26.9	100.0				
	Total	104	100.0	100.0					

The findings from percentage analysis showed that most of the respondents fall in the age group between 26 and 35 years of age. The males and female respondents account for Fifty six percent and forty four percent of the sampled population. About seventy percent of the sampled employees were graduates and about twenty seven percent of sampled employees were postgraduates. It is assumed that most branches in the region have similar employee distributions.

## 6.2. Factor Analysis

## 6.2.1. Exploratory Factor Analysis (EFA)

For conducting EFA, SPSS 20 software was used. Before moving towards the extraction of factors, In order to assess the appropriateness of the respondent data for Exploratory Factor Analysis some prior tests were carried out comprising the Kaiser-Meyer-Olkin (KMO) test (Kaiser, et. al., 1974) and Bartlett's test of Sphericity (Bartlett, 1954) adequacy. In order to check the case to variable ratio and suitability of Components Analysis,

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these tests were followed. The primary examination of the correlation matrix revealed that several of the items were correlated (above 0.3). The results for Kaiser-Meyer-Olkin for measure of sample adequacy was 0.702 than the usually suggested value of 0.6 (Tabachnick and Fidell, 2001), and that Barlett's test of sphericity produced 0.000 respectively, which should be significant (p<0.05) for factor analysis to be suitable (Bartlett, 1954). The researcher scored a significant value of 0.000 which is even below .05 and indicates that the sample is adequate and the data is suitable for Factor analysis. The reliability of the research instrument tested and found as Cronbach alpha value of .831(>.5) showing that the scale is reliable. Later factor analysis was performed for analyzing the convergent and discriminant validity.

## Reliability statistics

Employee Engagement					
Cronbach's Alpha	N of Items				
.831	27				

Employee Engagement						
Kaiser-Meyer-Olkin Measure o	702					
Bartlett's Test of Sphericity	Approx. Chi-Square	2480.663				
	Df	351				
	Sig.	.000				

The Principal Component Analysis (PCA) method was used with Varimax Rotation (Table 4) for identifying the total variance explained by principal components.

Total Varia	nce E	xplained		-			-		
	Initia	l Eigenvalu	es	Extract Loading	ion Sums gs	of Squared	Rotatio Loading	n Sums gs	of Squared
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.589	35.514	35.514	9.589	35.514	35.514	3.794	14.054	14.054
2	2.937	10.879	46.394	2.937	10.879	46.394	3.180	11.777	25.831
3	2.419	8.958	55.351	2.419	8.958	55.351	3.069	11.367	37.198
4	1.768	6.548	61.899	1.768	6.548	61.899	2.917	10.803	48.001
5	1.369	5.070	66.969	1.369	5.070	66.969	2.872	10.637	58.637
6	1.237	4.580	71.549	1.237	4.580	71.549	2.789	10.331	68.968
7	1.158	4.290	75.840	1.158	4.290	75.840	1.855	6.871	75.840
8	.994	3.683	79.522						
9	.797	2.951	82.474						
10	.763	2.827	85.301						
11	.641	2.374	87.675						
12	.572	2.118	89.792						
13	.521	1.928	91.721						
14	.370	1.370	93.091						
15	.356	1.320	94.411						
16	.315	1.168	95.578						
17	.229	.847	96.426						
18	.201	.745	97.171						
19	.184	.683	97.854						
20	.136	.504	98.358						
21	.098	.361	98.719						
22	.084	.312	99.031						
23	.076	.280	99.311						
24	.064	.238	99.549						
25	.055	.203	99.752						

 Table 4. Explanation of Total Variance.

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26	.046	.171	99.924						
27	.021	.076	100.000						
Extraction N	Extraction Method: Principal Component Analysis								

The variance of the variables using Principal Component Analysis was depicted in table above where we have 27 components as we have 27 factor variables. Eigen values were defined as variances of the principal components. The total column comprises the Eigen values. The first component at all times describes the highest variance and therefore owes highest Eigen value too. The next components explain as much left over variance as it can, and so on the consecutive components too. Hence, each successive component would describe for a successive lesser variance. The sum total of Eigenvalues will always be equal to the total number of items or variables. By applying Kaiser Criterion (K1 Rule), the components with Eigen value more than 1 were retained.

All Components from 1 to 7 have the Eigen values more than 1, therefore the researcher retained these 7 components. Extraction sum of the squared loadings provides the variance of those components only which has Eigen value higher than 1. It was for the 7 components in this study. These values were same as the initial Eigen values. Rotation sum of square loadings gives the Eigen values by rotating the components. Cumulative frequency for 7<sup>th</sup> component portrays that 75.84% of the variances were accounted by the first 7 components.

## **6.2.1.1. Component Matrix:**

Principal Component Analysis can be used when one intends to derive the minimum number of factors extracted and expound the maximum percentage of variance in the original variable. It has been applied to know if there exists any relationship amongst the variables and to eliminate any variables not related to engagement. It has been acclaimed by several academicians, that if one is unable to derive logic out of the Kaiser Criterion, then the researcher should use multiple criteria for extracting factors on the basis of fixing there number (Costello, et al., 2005). Thompson et al., (1996) and Hair, et al., (1995) envisaged that the concurrent use of multiple

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decision rules is suitable and often anticipated.

The Rotated Components Matrix below (Table 5) presents the results of the final analysis. The outcomes displayed here reflect the Rotated Component Matrix, which shows that about 7 factors were extracted for being Engagement drivers.

Rotate	Rotated Component Matrixa							
Item	Compo	onent Er	nployee	e Engag	gement	;		
No.	1	2	3	4	5	6	7	Reliability
18	.559							
24	.725							
29	.877							.875
22	.740							
25	.837							
12		.593						
6		.559						
10		.850						.837
9		.539						
16		.603						
7			.524					
4			.781					.768
5			.836					
1				.832				
2				.861				.775
14				.583				
17					.817			
8					.877			.825
20					.559			
28						.673		
11						.730		.698
13						.693		
19							.620	.354

 Table 5. Rotated Component Matrix:

15							.800	
23							-	
							.561	
Extraction Method: Principal Component Analysis.								
Rotation Method: Varimax with Kaiser Normalization.								
a. Rotation converged in 8 iterations.								

The above Table 5 was used to understand the results of analysis. Components were rotated to make them simple to interpret. Here different items are described and predicted by different underlying components, explains individually more than one item. However, each variable has certain loading value from the different components but the values less than |.50| were excluded from the table. Variables were sorted in a way that the components presenting the highest loading value get posted on the top and get followed by the lesser and lowest ones.

## 6.2.1.3. Extraction of Drivers of Employee Engagement

In order to attain definite factorability, the driver identification process was conducted in a systematic manner which resulted in strong conceptual foundation of the anticipated structure taking references from the theoretical paradigms and previous researches.

The drivers of employee engagement were determined and extracted through a robust study of Factor Analysis and correlation. The form and correctness of the factor solution was established through application of discretion and arbitration of the researcher. At the final stage, to determine the variable's role and contribution in determining the factor structure, the factor loadings for each variable was processed. The loadings of  $\pm 0.5$  or greater were considered practically significant as such the coefficients below 0.5 were suppressed, to show strong correlation of the variable with the factor. After obtaining the factor solution through proper process factor labelling of the same was carried out. This process was about assigning the meaning to the factor structure. The factors were thereafter named by the researcher to give exact reflection of the variables they lies in.

The following table depicts the name of Components extracted through Exploratory Factor Analysis and there Reliability scores individually.

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Sl. No.	Item/Question No.	Component extracted	Reliability of Component (Cronbach alpha)
1	18, 24, 29, 22 and 25	Employees' Job satisfaction	0.875
2	12, 6, 10, 9 and 16	Employees' Pay and financial benefits	0.837
3	7, 4 and 5	Work Environment	0.768
4	1, 2 and 14	Employees' Job Profile	0.775
5	17, 8 and 20	Employees' Career Progression	0.825
6	28, 11 and 13	Leadership	0.698
7	19,15 and 23	Organisation Culture	0.354

The following subsequent tables give an overview of the factor structures formed. The consolidated list of items of research instrument is placed at Appendix 1.

**Component 1.** Job Satisfaction

Question No.	Item	Factor Loading
Q 18	There is fair treatment among all employees and equal opportunities are provided to perform irrespective of any demographical difference	.559
Q 24	There is no affect of tenure of employment in the level of my job satisfaction and engagement towards my work	.725
Q 29	Job security gained to me in the job is reasonable	.877

Q 22	Bank provides suitable leave and extra benefits policy to fulfil personal commitments	.740
Q 25	Bank provides suitable leave and extra benefits policy to fulfil personal commitments	.837

Component 2. Pay and Benefits.

Question No.	Item	Factor Loading
Q 12	The internal communication and work collaboration in all processes is worthwhile	.593
Q 6	My pay and benefits are competitive to the similar jobs in the banking sector.	.559
Q 10	The bank provides rewarding performance based incentives and appraisals with promising rewards and recognition	.850
Q 9	The Human Resource of the bank is promising and works on innovative practices for people management, attracting & retaining talent	.539
Q 16	I have a strong belief in my management and superiors	.603

## **Component 3.** Work Environment

Question No.	Item	Factor Loading
Q 7	I feel satisfied and secured in the working	.524

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	condition provided	
Q 4	The Banks' practices an ethical and customer- employee focused business	.781
Q 5	The Bank's infrastructure and resources create a lively and good work environment	.836

Component 4. Job Profile.

Question No.	Item	Factor Loading
Q 1	As an employee, I am aware about my Bank as a brand name, its mission vision and work culture	.832
Q 2	I am well acquainted/ familiar with my job profile and processes	.861
Q 14	When required, my opinion/feedback counts to the management in decision making for further improvements	.583

Component 5. Sustainability and Career Progression.

Question No.	Item	Factor Loading
Q 17	The training provided in the job improves the efficiency to do the job.	.817
Q 8	The bank provides good opportunities on the overall learning, training and development of the employees	.877
Q 20	My manager encourages me to perform better and provides full support	.559

**Component 6.** Leadership.

Question No.	Item	Factor Loading
Q 28	The job provides freedom to use my own judgment	.673
Q 11	The co workers are friendly and cooperative and believe in teamwork	.730
Q 13	The leadership and immediate supervisors are cooperative and encouraging	.693

Component 7. Organizational Culture.

Question No.	Item	Factor Loading		
Q 19	As an employee , I feel responsible and committed towards my job	.620		
Q 15	Q 15 The bank is actively involved in activities in relevance to society and stakeholders			
Q 23	Bank supports in career advancement and education	561		

## 6.2.1.4. Result of Analysis of Engagement Drivers.

During analysis, it was observed that there were seven drivers that were predominantly identified with Employee engagement in branches of SBI. These were Employees' Job Satisfaction, Employees' Remuneration and financial benefits, Branch's Work Environment, Employees' Job Profile, Employees' Career Progression, Leadership support by immediate superiors and Branch's Organisation Culture. Employees' Job satisfaction was characterized by item No 18, 24, 29, 22 and 25 which showed that within the prescribed working hours and with suitable leave benefits, employees were committed towards their job irrespective of their tenure of employment. Employees Remuneration and financial benefits were characterized by item No. 12, 6, 10, 9 and 16 which showed that with strong internal communication and work collaboration, employees' pay and benefits were

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comparative to similar kinds of jobs in other sectors and the bank rewarded them through performance based incentives & appraisals. Work Environment was characterized by Item No. 7, 4 and 5 which showed that with ethical, customer and employee focused business, employees felt satisfied and secured in organizational working conditions provided at branches. Employees' Job Profile was characterized by Item No.1, 2 and 14 which showed that with employees' significant role in Bank decision making, the employees were aware about the bank, its mission, its processes and work culture. Employees' Career Progression was characterized by Item No. 17, 8 and 20 which showed that irrespective of demographical differences, the Bank provided good equal opportunities for the overall learning, training and development of all the employees with full managerial support. Leadership was characterized by Item No. 28, 11 and 13 which showed that with Co-workers being friendly, the immediate superiors and leadership was cooperative and encouraging which provided employees the freedom to use their own judgement. Organisation Culture was characterized by Item No. 19, 15 and 23 which showed that with minimal bank supports in employees' education and personal growth the employees were focused to their job and bank was found to be actively involved in activities in relevance to society and stakeholders.

#### 6.3. Validation of Factor Analysis

Exploratory Factor Analysis is a data driven technique and depends on a number of individually subjective decisions which are to be taken by the researcher. Hence the factor structure can be cross validated in an appropriate manner by conducting Confirmatory Factor Analysis (Byrne, 1989; Jöreskog et al., 1989; Pedhazuret et al., 1991). Despite of a number of methods for validation of factor structure, it was also important to do validity assessment to make the results more robust and resulting factor stable.

Once the reliability was established for the construct of employee engagement, the next step was to determine and prove the validity through:

- 1. Convergent validity where scales correlates with other scales.
- 2. Discriminant validity where scale is sufficiently different from other

related scales.

The researcher employed Confirmatory Factor Analysis in order to establish a prominent factor structure.

## 6.4. Confirmatory Factor Analysis (CFA)

The researcher thereafter articulated the measurement model within CFA. It is a multivariate statistical technique used to test that how well the variables been measured, represent the construct. Both CFA and EFA were similar, but in Exploratory Factor Analysis, data was explored simply and information was extracted about the set of factors which represent the data comprehensively. In Exploratory Factor Analysis, all variables been measured were related to each latent variable. Confirmatory factor analysis (CFA) is a tool that helps to reject or confirm a measurement theory. CFA is joined with the construct validity to test quality of the measured variables. It is required to specify in advance the factors that define a set of variable.

The researcher identified and defined each factor after Exploratory Factor Analysis:

- Organizational Culture
- Job Profile
- Work Environment
- Job Satisfaction
- Pay and Benefits
- Leadership
- Sustainability and Career Progression

The next stage of research is Model development through AMOS 20 software tool, where the constructs should be indicated by the measured variables for bringing the set of latent factors in the purview of statistical identity. After formulating specific hypothesized model, researcher submits these specifications and the data collected through scale administration for analysis. Here each parameter is estimated for their unique variance, and simultaneously covariance also gets reflected in the observed covariance matrix.

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Figure 1. Graphical Representation of AMOS results: Model.

The label JS is for Job Satisfaction, P for Pay and benefits, WE for Work Environment, JP for Job Profile, L for Leadership, CP for Career Progression and OC for Organisation Culrure.

The figure 1drawn above represents the multiple regression model in which the latent variables i.e. JS, P, WE, JP, L, CP and OC were the seven components presented in the oval structure and projected as linear combination of observed variables presented in rectangles. The single headed arrow signifies the standardized regression weight of the variable been observed on underlying latent constructs. The double headed arrows denote correlation among the constructs and values associated with it reveal the correlation coefficients.

Item		Component	Estimate	S.E.	C.R.	Р
18	<	Job_satisfaction	1			
24	<	Job_satisfaction	0.833	0.136	6.116	***
29	<	Job_satisfaction	0.989	0.139	7.093	***
3	<	Job_satisfaction	0.321	0.108	2.963	0.003
22	<	Job_satisfaction	1.254	0.172	7.271	***
25	<	Job_satisfaction	1.529	0.193	7.917	***

Table 6. Statistics Involved in the Model

12	<	Pay_benefits	1			
6	<	Pay_benefits	1.391	0.22	6.335	***
10	<	Pay_benefits	1.207	0.219	5.514	***
9	<	Pay_benefits	1.539	0.224	6.866	***
23	<	Pay_benefits	1.058	0.786	1.346	0.178
16	<	Pay_benefits	1.745	0.21	8.318	***
7	<	Work_Environment	1			
4	<	Work_Environment	0.382	0.066	5.806	***
5	<	Work_Environment	0.5	0.07	7.195	***
1	<	Job_Profile	1			
2	<	Job_Profile	1.044	0.206	5.058	***
14	<	Job_Profile	1.806	0.278	6.508	***
17	<	Career_Progression	1			
8	<	Career_Progression	0.78	0.068	11.404	***
20	<	Career_Progression	0.487	0.093	5.258	***
28	<	Leadership	1			
11	<	Leadership	0.542	0.078	6.979	***
13	<	Leadership	0.749	0.13	5.753	***
19	<	Organisation_culture	1			
21	<	Organisation_culture	0.285	0.172	1.65	0.099
15	<	Organisation_culture	0.326	0.107	3.028	0.002

(\*\*\* denotes p-value <.001)

The next stage was assessment of the measurement model's validity where the Fit Indices, Path Estimates, Size of Path Estimate, and Statistical Significance were checked. Every identified driver after analysis confirms that the path estimated in the study was significant and the statistics

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involved in the model (table above).

The standardized path coefficient was calculated, by keeping any of regression weight as 1 for base and others calculated accordingly.

#### 6.4.2. Model Fit Summary

This section presents the model fit measures to further justify the research work. Model evaluation is an unsettled and difficult task associated with structural modeling. As suggested by Hair et al. (2010) a researcher should concentrate on at least one absolute fit index and one incremental fit index. The below drawn Table 7, displays the Model Fit Measurement to clarify the validity issues.Bollen and Long (1993), MacCallum (1990), Mulaik, et al. (1989), and Steiger (1990) mentioned different recommendations on this topic.

Measure CMIN		Estimate	Threshold	Interpretation
		1464.577		
	DF	303		
	CMIN/DF	4.834	Less than 5	Reasonable
	NFI	0.459	Close to 1.000	Almost 50 % fit
	CFI	0.507	>0.95	Almost 50 % Fit
	GFI	0.551	Close to 1.000	More than 50% Fit
	SRMR	0.18	<0.08	Almost 50% fit
	RMSEA	0.193	< 0.06	May be Refined

Table 7. Model Fit Measurement.

The above table exhibits the Model Fit Summary of the aforementioned model, as the value for CMIN/DF was coming out to be 4.834 which was in the reasonable region, "... different scholars have endorsed using ratios as low as 2 or as high as 5 to show a reasonable fit." (Marsh & Hocevar, 1985). All indicators were weighed down, with high significance, on the latent

variables. The RMSEA of about 0.05 or less indicates a close fit of the model with respect to the degrees of freedom. This figure could be a subjective judgment, therefore, cannot be regarded as absolute or infallible, but it is more judicious and reasonable than the requirement of exact fit where RMSEA would be 0.0. The value of about 0.08 or less for the RMSEA would reflect a reasonable error of approximation and would not want to employ a model with a RMSEA having value of greater than 0.1. (Browne and Cudeck, 1993).However considering the other values within acceptable range the high value of RMSEA may be considered.

## 7. Hypothesis Testing

## 7.1. Analysing the Construct Validity

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Composite Reliability (CR) is an estimate of Reliability which is less biased than Chronbach alpha. Its acceptable value is 0.7 and above. The Convergent Validity got checked by observing the average variance extracted and factor loadings of the constructs. All the indicators showed significant loadings onto respective latent constructs (drivers or factors) having p < 0.001.

	AVE	CR	Organis -ation culture	Leader -ship	Career Progress ion	Job Profile	Work Environ ment	Pay benefits	Job Satisfac -tion	P (Signifi- cance)
Organization Culture	0.446	0.307	0.309							***
Leadership	0.488	0.741	0.19	0.549						***
Career Progression	0.583	0.802	0.192	0.319	0.734					***
Job Profile	0.591	0.808	-0.009	0.132	0.067	0.233				***
Work Environment	0.527	0.763	0.114	0.205	0.296	0.345	0.869			***
Pay Benefits	0.408	0.769	0.023	0.273	0.182	0.145	0.352	0.232		***
Job satisfaction	0.571	0.866	-0.029	0.277	0.262	0.171	0.432	0.219	0.53	***

 Table 8. Convergent Validity of the Constructs.

Divergent validity is checked by doing comparison of the average variance extracted of the corresponding components. The values of the Average Variance Extracted by itself is highest as compared to the others factors, which support the discriminant or divergent validity of the constructs. Therefore, the measurement model reveals that there exists a

better construct validity.

Thus, the hypothesis that "the drivers identified will not predict employee engagement" gets rejected.

This could be interpreted as that the drivers identified through this study are much capable of predicting employee engage of SBI employees.

# 7.2. Analyzing the effect of Demographic factors on employee engagement

Demography is an important variable and its factors plays a crucial role in creating Employee engagement. The Kruskal Wallis test and Mann Whitney U test helped in analyzing the association of the drivers of employee engagement with demographic factors. The Kruskal-Wallis H test, is a rank- based nonparametric test which is often known as "one-way ANOVA on ranks". It determines if there are statistically significant differences among two or more groups of an independent variable on a continuous or ordinal dependent natured variable.

Rank						
Gender of Responden	N	Mean Rank	Sum of Ranks	Mann- Whitney	P value	
Job Satisfaction	Male	58	54.64	3169.00	1210.000	.413
	Female	46	49.80	2291.00		
	Total	104				
Pay and benefits	Male	58	54.52	3162.00	1217.000	.439
	Female	46	49.96	2298.00		
	Total	104				
Work Environment	Male	58	51.24	2972.00	1261.000	.627
	Female	46	54.09	2488.00		

Table 9. Mann-Whitney Test on Gender Basis: Individual Driver.

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	Total	104				
Job Profile	Male	58	52.91	3069.00	1310.000	.873
	Female	46	51.98	2391.00		
	Total	104				
Career Progression	Male	58	56.31	3266.00	1113.000	.141
	Female	46	47.70	2194.00		
	Total	104				
Leadership	Male	58	53.79	3120.00	1259.000	.620
	Female	46	50.87	2340.00		
	Total	104				

The Mann-Whitney U test was applied for comparing the differences among two independent groups while the dependent variable could be either ordinal or continuous, but does not has normal distribution. In Table 9 the mean value of male and female participants is calculated for separate variables and later if it is found that the variable is statistically significant as p < 0.05. The mean value of male participants is higher than that of female participants for all the engagement drivers, but it was found that p < .05 for all the variables, which reveal that the engagement drivers have the similar effect for male and female respondents. Overall, it was found that p < .05 hence; there is not a statistically significant difference in the employee engagement on the basis of gender.

Ranks					
	Age of Respondent	Ν	Mean Rank	Kruskal-Wallis	P-Value
Employee Engagement	< 25 years	11	53.82	.276	.964
	26years-30years	37	53.49		
	31 years to 35 years	39	50.51		
	>36 years	17	54.06		

Table 10. Kruskal-Wallis Test on the Basis of Age: All Drivers.

Total	104		
1000	101		

Overall, it was found that p > .05 hence; there is not a statistically significant difference in the employee engagement on the basis of age group.

**Table 11.** Kruskal-Wallis Test on the Basis of Educational Qualification: All drivers.

Ranks					
	Qualification of respondent	N	Mean Rank	Kruskal-Wallis	P-Value
Employee Engagemen t	Graduate	76	53.55	.345	.557
	Post graduate	28	49.64		
	Total	104			

Since p > .05, we can say that there is not a statistically significant difference in the drivers of engagement among employees with different educational qualifications. But, employees with graduate degrees are more affected by the engagement drivers.

**Table 12.** Kruskal-Wallis Test on the Basis of Income Per Annum: All Drivers.

Ranks					
	Income level of respondent	Ν	Mean Rank	Kruskal-Wallis	P-Value
Employee Engagement	<2.5 lakh	8	68.06	75.473	.140
	2.5 lakh-5 lakh	42	52.65		
	5 lakh-10 lakh	47	47.34		
	>10 lakh	7	68.43		
	Total	104			

The highest mean value is of more than Rs 10 lakh income for employee engagement. Since p > .05 we can say that there is not a statistically significant difference in the engagement drivers for the income per annum.

Ranks					
	Tenure in same branch	Ν	Mean Rank	Kruskal-Wallis	P-Value
Employee Engagement	< 2 years	26	54.37	.547	.761
	2 years-5years	37	54.19		
	>5years	41	49.79		
	Total	104			

**Table 13.** Kruskal-Wallis Test on the Basis of Tenure of Employment: AllDriver.

The Me an value of respondents working in the ban k for less than 2.5 years is highest for the engagement drivers.

Since p > 0.05 for the variable, there is no statistical difference in terms of employment in same branch among the respondents.

Thus, the null hypothesis that "engagement drivers are independent of demographic factors" could be accepted.

This infers that employees of which ever demographic profile could be found engaged in their jobs irrespective of it.

## 8. Discussion

Almost half of respondents strongly agreed that the bank provides good opportunities on the overall learning, training and development of the employees and almost same proportion of employees agreed that there is fair treatment for all employees and providence of equal opportunities prevails to perform irrespective of any demographical difference. Further, it was witnessed that there is no statistical difference in employee engagement among the employees based on demographical factors such as age, gender, marital status, income level and type of family. Almost one forth of the respondents disagreed that the job provides freedom to use their own judgment. The seven engagement divers identified were – Job Satisfaction, pay and benefits, work environment, leadership, sustainability and career progression, job profile, organization culture.

It was observed that most of the respondents fell in the age group of 26

to 35 years which reflects that employees holding non managerial posts in the bank are youthful and heading towards mid-career. Therefore the responses collected could be considered authentic and genuine. Although selecting respondents randomly from population, the sample size had nearly equal proportion of male and female employees, it shows that banking sector shares equal job opportunities for male and female employees.

Exploratory Factor analysis revealed that the independent variable. Employee Engagement itself converged into seven factors (Job satisfaction, pay and benefits, work environment, career progression, job profile, leadership and organization culture) in which maximum variance was extracted by Job satisfaction which shows that employees who are satisfied will be more engaged in their job. Further job satisfaction also ensued maximum reliability as well.

The statistics involved in the Confirmatory Factor Analysis revealed that all the seven components were significant in nature and were able to represent employee engagement to great extent possible. Model fit Measurement revealed that values of CMIN/DF, NFI, CFI, GFI, SRMR and RMSEA were reasonable enough to justify a fit model. Further Hypothesis testing revealed that since the factors were explored and confirmed through factor analysis with acceptable convergent and divergent validity, it can be concluded that the prediction of employee engagement status of an employee is possible through the measurement of engagement drivers administered by the researcher through a structured questionnaire and that the demographic profile of an employee does not influence his/her job engagement.

## 9. Conclusion

The comprehensive study reveals that employee engagement is an integral part of human resource processes in today's scenario and the drivers identified have a close impact on employee preferences that lead to engagement. On further analysis it was established that drivers of employee engagement does not have a relationship with demographic factors therefore they do not influence or protect the employees to be more engaged resulting in expected organizational outcomes. It has been already proved that employee engagement is crucial to sustain loyalty and retention of employees

in the organization which helps in creating a healthy organization culture and eventually leads to better individual and organization performance.

It has also been established that with team work and friendly atmosphere in branch, supported by guidance from supervisors which gives freedom to employees to use their own judgement, the employees' performance is bound to improve and which results in maximizing the branch-profits and ultimately leads to organization growth. The present study covered the State Bank of India where the data was collected from different branches of banks in the Raipur region through survey. The findings will improve the performance and retention of employees on the middle level management which forms the maximum fraction in the Indian Banking sector. The factor shortlisted and tested were the result of robust study of the existing literature of employee engagement where the researcher has shortlisted 27 factors for employee engagement related to the area of our study on the basis of content analysis. All the related tests were conducted to check the reliability and validity.

## **10. Managerial Implications**

Based on the results of the study it can be resolved that a strong committed and engaged workforce will cover certain critical issues related to the employee's preferences in bank services and can infuse a better work environment along with a responsible leadership and dedicated human resource ensuring better implementation of engagement strategy for improving performance and retention of employees on the middle level management which forms the maximum fraction in the Indian Banking sector. Therefore, better practices in terms of job satisfaction, pay benefits, work environment, job profile, career progression, leadership and organizational culture should be assured, so that employees could be engaged profusely. The study implies that better organizational culture and higher satisfaction employee leads to the engagement of employee in a better way. This study would also help researchers to perform further research on association of job engagement with various independent and dependent, individual and organizational variables. Further, the study will help in drafting the human resource policies for employees of State Bank of India after the recent merger of five associate banks of State Bank of India.

## 11. Limitations of the Study and Scope of Further Research

1. This is a cross sectional research study that has been undertaken exclusively in Raipur region as the area caters to capital region of growing state Chhattisgarh due to time and economic constraints. Therefore for generalization further research is required.

2. This research study has been undertaken exclusively for the State Bank of India in banking sector therefore generalization across all financial services, insurance sector such as Life Insurance Corporation of India and other service sectors cannot not be done.

3. This research study has been undertaken exclusively for nonmanagerial executives staff and employees, however the researcher intends to study the responses of Top level employees level employees to get the scenario of banking sector in future.

## References

- [1] S. Bates, Getting engaged, HR Magazine 49(2) (2004), 44-51.
- [2] R. Baumruk, The missing link: the role of employee engagement in business success, Workspan 47 (2004), 48-52.
- [3] T. W. Britt, A. B. Adler and P. T. Bartone, Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness. Journal of Occupational Health Psychology 6 (2001), 53-63.
- [4] F. D. Frank, R. P. Finnegan and C. R. Taylor, The race for talent: retaining and engaging workers in the 21st century, Human Resource Planning 27(3) (2004), 12-25.
- [5] J. K. Harter, F. L. Schmidt and T. L. Hayes, Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta- analysis, Journal of Applied Psychology 87 (2002), 268-279.
- [6] J. K. Harter, F. L. Schmidt and C. L. M. Keyes, Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies, In C. L. M. Keyes and J. Haidt (Eds.), Flourishing: Positive psychology and the life well-lived (2003), 205-224. Washington, DC: American Psychological Association.

- [7] M. Johnson, Workforce Deviance and the Business case for employee engagement, Journal for quality and participation 24(2) 11-16.
- [8] W. A. Kahn, Psychological conditions of personal engagement and disengagement at work, Academy of Management Journal 33 (1990), 692-724.
- [9] W. A. Kahn, To be full there: psychological presence at work, Human Relations 45 (1992), 321.
- [10] D. R. May, R. L. Gilson and L. M. Harter, The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work, Journal of Occupational and Organizational Psychology 77 (2004), 11-37.
- [11] Melcrum Publishing, Employee Engagement, How to build a high performance workforce, An independent Melcrum Research Report Ecceutive Summary, (2005).
- [12] Soyars, Maureen; Brusino and Justin, Essentials of Engagement. T+D, 63(3) (2009), 62-65.

## Appendix 1.

Questionnaire Survey: Employee Engagement practices

Gender \* Male \* Female

Age \*<25 years \* 26-30 years \* 31-35 years \* 36 years and above

Highest Educational Qualification \* Post Graduate \* Graduate \* Others (please specify) \_

Tenure of employment in the same branch\* Less than 2 years \* 2-5 years \* 5 years & above

Income per Annum \*<2.5 lakh \* 2.5-5 lakh \* 5-10 lakh \*>10 lakh

Marital Status \*Single \* Married \* Divorced \* Other

Number of children \_\_\_\_\_

I am residing in: \* Joint family \* Nuclear family \* Alone \* Others (please specify) \_\_\_\_\_

Please give your views and tick (  $\lor$ ) in :-

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## o Strongly Agree (SA) /दृढ़तापूर्वकसहमत Undecided (U) / दुविधामें o Disagree

o Agree (A) /सहमत o

S1Item SA U D SDА No. 1 As an employee, I am aware about my Bank as a brand name, its mission vision and work culture.  $\mathbf{2}$ I am well acquainted / familiar with my job profile and processes. 3 The resources are easily available to make the processes effective. 4 The Banks' practices an ethical and customer -employee focused business.  $\mathbf{5}$ The Bank's infrastructure and resources create a lively and good work environment 6 and benefits are My pay competitive to the similar jobs in the banking sector 7 I feel satisfied and secured in the working condition provided 8 The bank provides good opportunities the on overall learning, training and development of the employees 9 The Human Resource of the bank is promising and works on innovative practices for the people management, attracting and retaining talent 10 The bank provides rewarding performance based incentives and appraisals with promising rewards and recognition.

(D) / असहमत o Strongly Disagree (SD) / दृढ्तापुवकआ	तहमत
--	------

11	The co workers are friendly and cooperative and believe in team work			
12	The internal communication and work collaboration in all processes is worthwhile			
13	The leadership and immediate supervisors are cooperative and encouraging			
14	When required, my opinion/feedback counts to the management in decision making for further improvements.			
15	The bank is actively involved in activities in relevance to society and stakeholders			
16	I have a strong belief in my management and superiors			
17	The training provided in the job improves the efficiency to do the job			
18	There is fair treatment among all employees and equal opportunities are provided to perform irrespective of any demographical difference			
19	As an employee, I feel responsible and committed towards my job			
20	My manager encourages me to perform better and provides full support			
21	My bank provides me complete job satisfaction			
22	Bank provides suitable leave and extra benefits policy to fulfill personal commitments			
23	Bank supports in career advancement and education			
24	There is no affect of tenure of			

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	employment in the level of my job satisfaction and engagement towards my work			
25	The working hours are convenient and balanced			
26	The job provides freedom to use my own judgement			
27	Job security gained to me in the job is reasonable.			