CHAPTER 4: RESEARCH METHODOLOGY

This chapter includes four sections to describe the research methodology followed. The first section presents motivation for selecting the target population. The second section elaborates on the data collection procedure and the details of the participants. The third section describes the measures used for capturing data. The fourth section discusses various steps for analyzing the data.

4.1 Motivation for Selecting the Target Population

According to PwC Saratoga India 2011-12 survey, 35% of the Indian banking workforce have tenures of less than two years and as per the HR services company Randstad India, the Indian banking industry is expected to be among the biggest job creators (20 lakh jobs) during 2014-2019 (PwC Saratoga India 2011-12 survey, 2012). Also, recent schemes announced by the Government of India such as, ‘Jan-Dhan Yojana’, ‘Pradhan Mantri Jeevan Jyoti Bima Yojana’, and Gold bond scheme demand bank employees to open bank accounts and/or channelize funds at a large scale in a specified time frame (National portal of India, 2016). A recent demonetization move of the central government to curb black and fake money of banning the old INR 500 and 1000 denominations has made banks the center of Government’s focus (Ministry of Finance, 2016). Given the promising future of banking industry in India and the strategic importance of banks in an economy, it is imperative for the banks to happily engross and optimally utilize their workforce. Amid such high expectations and immense pressure, employees would like to work for those banks that optimally utilize their competence and
provide cognitive, emotional, and physical support whenever necessary because past literature suggests that highly engaged employees improve productivity (HBR, 2013).

4.2 Procedure and Participants

For the purpose of this research, the target population was employees of Indian commercial banks. The sampling frame covered employees of all the nine Nifty-50 listed banks located in Hyderabad, a cosmopolitan city. Being a hub of all the Nifty-50 listed banks, Hyderabad (as it aptly represents the Indian banking industry) was chosen for collecting the data. The sample size of 400 employees was decided based on the recommendation that the number of responses should be at least five times the total number of items i.e., \(380 = 5 \times 76\). The details of the banks in the sampling frame (2014-15) are shown in Table 4.1.

<table>
<thead>
<tr>
<th>Name of the bank</th>
<th>No. of branches in Hyderabad</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Bank of India (excluding the associate banks)</td>
<td>197</td>
</tr>
</tbody>
</table>
HDFC Bank 65
ICICI Bank 58
Axis Bank 41
Punjab national Bank 36
Bank of Baroda 32
Kotak Mahindra Bank 27
Yes Bank 20
IndusInd Bank 8
Total 484

The study used a two-stage probabilistic sampling procedure. In the first stage, a pool of all the branches (484) of the banks listed in Table 4.1 was prepared and 50 branches were selected at random. In the second stage, the branch head was asked for the names of the employees. From those names, eight eligible employees (with a minimum of five-year work experience with the current bank) were selected at random. The responses were collected using a paper and pencil (offline) survey by an independent data collection agency between July and October, 2016. The branches that did not permit data collection or that had less than eight eligible respondents were not included.

The questionnaires did not include any respondent identification column. The confidentiality and privacy of the responses was promised and maintained. However, respondents were given the option to provide their e-mail address in case they were interested to know the study results (refer Appendix 5 for the complete questionnaire). Also, visiting cards of the respondents were collected only with their consent. The 400 respondents consisted of 140...
women and 260 men; 136 public sector and 264 private sector employees. All the questionnaires were complete in terms of the scale items. Other details captured in the questionnaires are given below:

<table>
<thead>
<tr>
<th>Particulars (in years)</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>32.44</td>
<td>4.86</td>
</tr>
<tr>
<td>Experience in the banking industry</td>
<td>8.18</td>
<td>3.52</td>
</tr>
<tr>
<td>Experience in industry other than banking</td>
<td>1.49</td>
<td>2.17</td>
</tr>
<tr>
<td>Experience in the current position</td>
<td>4.50</td>
<td>1.95</td>
</tr>
<tr>
<td>Experience with the current organization</td>
<td>7.00</td>
<td>2.99</td>
</tr>
<tr>
<td>Experience under the current supervisor</td>
<td>3.48</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Level of education

- 223, 56%: Graduate
- 164, 41%: Post Graduate
- 13, 3%: Data not available
4.3 Measures

The first page of the questionnaire had demographic details including the control variables. The other pages of the questionnaire had a total of 76 items including perceived organizational support, value congruence, and the five dimensions of job characteristics as the antecedents and the three dimensions of employee performance as consequences of work engagement. This set included items of the moderator, transformational leadership, as well. All
these 76 items were measured on a seven-point Likert scale (0 = strongly disagree or never and 6 = strongly agree or always).

*Work engagement* consisting of vigor, dedication, and absorption was captured by Schaufeli et al.’s (2006) nine-item Utrecht Work Engagement Scale (UWES-9) (Cronbach’s $\alpha > .70$). A sample item is: At my work, I feel bursting with energy.

*Employee performance* was captured by Williams and Anderson’s (1991) scale. In this scale, *task performance* contains seven items (Cronbach’s $\alpha = .91$); *OCB-I* contains seven items (Cronbach’s $\alpha = .88$), and *OCB-O* contains six items (Cronbach’s $\alpha = .75$). A sample item for OCB-I is: I help others who have been absent. A sample item for OCB-O is: My attendance at work is above the norm.

*Perceived organizational support* was captured by using Rhoades et al.’s (2001) eight-item scale (Cronbach’s $\alpha = .90$). A sample item is: My organization strongly considers my goals and values.

*Value congruence* was measured on O'Reilly and Chatman’s (1986) 12-item ‘psychological attachment with the organization’ scale. It consisted of three dimensions namely value similarity, pride in affiliation, and compliance. Caldwell et al.’s (1990) validated the value similarity dimension which is also called value congruence (Cronbach’s $\alpha = .79$). Researchers have often selected this dimension as an independent construct to represent value-congruence (e.g., Cable & DeRue, 2002; Wright & Pandey, 2008). This study however takes the entire scale to test whether value congruence emerges as a separate factor in the present context as well. A sample item is: Since joining this organization, my personal values and those of the organization have become more similar.
Job characteristics was measured on Sims et al.’s (1976) 20-item scale (Cronbach’s α for all dimensions >.75). A sample item for (1) Skill variety is: How much variety is there in your job? (2) Autonomy is: how much are you left on your own to do your own work? (3) Feedback is: to what extent do you find out how well you are doing on the job as you are working? (4) Task identity is: To what extent do you do a "whole" piece of work (as opposed to doing part of a job which is finished by some other employee?), and (5) Task significance is: To what extent you meeting with others in your work?

Transformational leadership was captured on Carless et al.’s (2000) seven-item scale (Cronbach’s α = .93). A sample item is: My supervisor fosters trust, involvement and cooperation among team members.

Since role is an important component of work engagement as per the self and role theory, the type of role (in terms of managerial and non-managerial; 0 = managerial and 1 = non-managerial) was controlled. Also, the nature of the organization (in terms of public or private; 0 = public and 1 = private) was controlled because of the inherent differences in the degree to which the roles are structured.

4.4 Data Analyses

Data analyses were carried out in two phases. In the first phase, reliability and validity of the measures under investigation were checked and in the second phase testing of hypotheses was done. The details are given below:
4.4.1 Instrument Testing

First, the reverse-coded items in the questionnaire were converted to non-reversed values by subtracting that particular observation from six. This is because the questionnaire items ranged from 0 to 6 (0 = never or strongly disagree to 6 = always or strongly agree).

For principal component analysis (PCA), a combination of Kaiser-Meyer-Olkin (KMO) with minimum .50 acceptable (Black & Porter, 1996), Bartlett's Test with significance of $p<.05$, Eigen value greater than 1 (Carlson, Kacmar, Wayne, & Grzywacz, 2006), percent total variance explained with minimum 60%, and clarity in factor loadings was checked. For reliability check, Cronbach’s alpha values were calculated. The coefficients greater than .55 were acceptable as suggested by Brown, Davidsson and Wiklund (2001).

4.4.2 Hypotheses Testing

For confirmatory factor analysis (CFA), measurement model was tested by calculating goodness of fit index (GFI; threshold value is greater than .90) root mean square error of approximation (RMSEA; threshold value is less than .08), standardized root mean square residual (SRMR; threshold value is less than .05), and chi-square/degrees of freedom ($\chi^2/df$; threshold value is less than 3). It examined the extent to which observed covariance matrix fits the theoretical covariance matrix. In order to ensure convergent validity, average variance extracted (AVE) for each construct must be at least .50 and for discriminant validity, the AVE values should be more than the maximum shared squared variance (MSV) values (Fornell & Larcker, 1981; Hair, Black, Babin, & Anderson, 2010).
Structural equation modeling (SEM) was done to test various hypotheses using Amos 20 software. This is a popular and advanced version of multiple regression analysis. SEM coupled with measurement model test helped the researcher analyze all the paths or test all the hypotheses simultaneously.