CHAPTER 4

RESEARCH METHODOLOGY

4.1 RESEARCH DESIGN

According to Cooper and Schindler (2003) [118] “The research design is the blueprint for the collection, measurement, and analysis of data”. The research activity on a time-based plan is the essence of research design, which helps the researcher in assigning the resources by posting crucial choices in methodology. There are two broad choices of study i.e., exploratory and descriptive. The descriptive is a kind of research suitable for formalized studies which are structured with the stated hypothesis. This study uses descriptive research as the domain has enough literature to formulate the hypotheses. Over 100 identified journals articles in the domain are reviewed, to identify the possible research gap. The journal titles used during the review include Work & Stress, Academy of management journal, “European journal of Work and Organizational Psychology”, “Career Development International”, Human Relations, Journal of managerial psychology, etc.,

The study is descriptive and cross-sectional in nature. In the first stage, the simple random sampling was performed in the study, belongs to probability sampling, which has more advantages than non-probability sampling, as it gives same status to all study samples in the sampling frame and thus reduces the bias. In the second stage, sampling adopted was judgment sampling, which belongs to non-probability sampling. The respondents were selected by using judgment sampling method from the randomly selected five Indian ports. The sample size for this study is 453. The samples were selected from Chennai port, Visakhapatnam port, Kochi port, Ennore port and Mumbai port. The data analysis has been carried out by using software like SPSS and SmartPLS [119]. The SPSS was used to generate the
descriptive statistics and SmartPLS was used to validate hypotheses empirically and to test the model.

4.2 SAMPLING METHOD

Multi-stages sampling is used in this study. The first stage is to select the ports using the simple random sampling with a sampling frame (refer the table below) and the second stage is to choose the respondents from the selected ports by using judgment sampling method. Judgmental sampling is a non-probability sampling designed to select the cases judged that the cases selected by the researcher will be same as that of study population. The researcher worked on two criteria viz., the respondent has the ability to read and understand the question and has experience of five years. During the first stage, the five ports (Chennai port, Visakhapatnam port, Kochi port, Ennore port and Mumbai port) have been selected by using simple random sampling method, from the list of 12 Indian major ports. Using two-stage sampling method, the sample collected from different Indian ports can be the representative of the population. The sample collected for this study is 453. The samples were selected from Chennai port, Visakhapatnam port, Kochi port, Ennore port and Mumbai port.

Table 4.1 Sampling frame

<table>
<thead>
<tr>
<th>S No</th>
<th>Major port of India</th>
<th>State</th>
<th>Sample selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kandla</td>
<td>Gujarat</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Paradip</td>
<td>Odisha</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>JNTP</td>
<td>Maharashtra</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mumbai</td>
<td>Maharashtra</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Visakhapatnam</td>
<td>Andhra Pradesh</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Chennai</td>
<td>Tamilnadu</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>Kolkata</td>
<td>West Bengal</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mangalore</td>
<td>Karnataka</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Tuticorner</td>
<td>Tamilnadu</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Ennore</td>
<td>Tamilnadu</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>Kochi</td>
<td>Kerala</td>
<td>Yes</td>
</tr>
<tr>
<td>12</td>
<td>Mormugao</td>
<td>Goa</td>
<td></td>
</tr>
</tbody>
</table>
4.2.1 Sample Characteristics

The samples are permanent employees of the port trust. Five port trust were selected. The employees of these port trust are the study sampling unit.

The researcher selected the sample respondents based on the judgment, i.e. that the experience of the respondents should not be below 5 years. The Majority of the respondents are males and engineers.

4.3 CONSTRUCTS/CONCEPTS DEFINITION

The study has used eight constructs with 57 items. The items for all the constructs are taken from the extant literature and used in the JD-R model. The outcome variables are job satisfaction and organizational commitment. The constructs are given below.

4.3.1 Job Autonomy

Job autonomy “is the degree to which the job provides the freedom and discretion to schedule work and decide which procedures to use in carrying out the job”. The scale has 4 items adapted from J. Hackman and Oldham (1976) [18]. The items are measured using 4 point Likert scale. The scale has anchor points ranging from “Very much like my experience” to “Not at all like my experience”.

4.3.2 Supervisor Support

Bates, Holton, and Seyler (1996) define supervisor support “as the extent to which supervisors reinforce and support the use of learning on the job” [120]. The scale has 9 items and measured using 5 point Likert scale. The sample questions are “My supervisor takes the time to learn about my career goals and aspirations”, “My supervisor cares about whether or not I achieve my career goals” etc.
4.3.3 Social support

Social support indicates the employees are cared for, esteemed, and as a member of a network system of reciprocal obligations. The scale is taken from the extant literature and adopted from [121]. The scale has three items and the sample items are “I feel close to the people at work”, “I feel appreciated by the people I work with”. The concept is measured using 4 point Likert scale. The scale has anchor points ranging from “Very much like my experience” to “Not at all like my experience”.

4.3.4 Job Demands

The present study defines “job demands as those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs” [7]. The scale has 11 items and has been adopted from extant literature. The scale is borrowed from Van Veldhoven and Meijman (1994) [122]. It is measured with anchor point “never” and “always”; a four-point scale. The questions like “The employees will do fast working? The workload is excess? To complete a task you need to work hard? Employees work with time pressure?”

4.3.5 Work Engagement

Work engagement stated in this study “as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” [41]. There are numerous instruments to gauge work engagement. The “Utrecht Work Engagement Scale (UWES)” involves measures for the evaluating the three dimensions of engagement and they are dedication, vigor and absorption. The UWES has used and validated in countries like China, Greece, Finland, Spain, South Africa, Netherlands [52]. The CFA have been applied and found that we can authorize the superiority of the three-factor arrangement that is hypothesized to that
several alternative structures and henceforth established the existence of only three dimensions.

In addition, the reliability of these dimension scales have been demonstrated has adequate in every study. It has been pointed out, though, that certain studies unsuccessful to discover the 3-factor assembly of job engagement [52].

This can be due to the poor translation when it derives to questions that have metaphors (e.g. “Time flies when I am working”). Additionally, it has remained contended that the aggregate score for job engagement can be occasionally be extra useful in quantitative research since due to modest to higher level of correlations among the dimensions. Schaufeli et al. (2006) [41] advanced in creating a small, nine-question variety of the UWES, and providing proof aimed at validity across nations. They displayed that the three dimensions of engagement are moderately to strongly related.

4.3.6 Burnout

The burnout used in this study has two dimensions viz., emotional exhaustion and depersonalization. Owing to burnout the employees became exhausted from extreme demands on one’s energy, their strength or resources round a year after the employee began working. Among the physical and behavioral signs, the employees acted, look-wise seems depressed [123]. This scale has six items and for each dimensions there are three items. The items are “I feel emotionally drained from my work” “I feel used up at the end of the workday” “I feel burned out from my work”. The scale is estimated using a response format of “seven-point Likert scale” and for “1= strongly disagree” and “7=strongly agree”. The scale is embraced from the Maslach burnout Inventory (MBI) [28].

4.3.7 Job Satisfaction

Job satisfaction as “pleasurable or positive emotional state” [38] is “a function of the perceived relationship between what one wants from a job and what
one perceives it is offering” [1]. The scale is adopted from the extant literature [124] with seven items. The scale is measured with a 7 point Likert scale and for 1 is “strongly disagree” and 7 is “strongly agree”.

Some questions of this construct are such as Overall job satisfaction? My compensation (salary)? Opportunities for advancement? Job security? and Company policies?

4.3.8 Organizational Commitment

Organizational commitment of an employee is defined as an “individual’s belief in and acceptance of the goals and values of the organization, and a strong desire to remain in an organization” [4]. The scale has 8 items and has been adopted from [4].

The scale is Unidimensional and the sample items are “I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful” “I praise my organization to my friends as a great place to work” “My values and the organization’s values are very similar”. The items of this scale are measured with a “7 point Likert scale” and for 1 is “strongly disagree” and 7 is “strongly agree”.