Chapter 4

Research Methodology

4.a Research Methodology

This chapter introduces the organization of the study which also highlights the rationale behind the quantitative research design, the instruments that will be used, and the administration of quantitative instruments, data collection and data analysis protocols etc.

Research:

Research in common parlance refers to a search for knowledge. “It is a careful investigation or inquiry especially through search for new facts in any branch of knowledge.” Research Methodology describes the research designed employed, the subject of the study, the instruments used in the gathering of data, the procedure followed in the gathering of data, and the analysis of the gathered data relative to the specific objective of the study and technique procedures.

Research classified into distinctive sorts relying upon the way of the reason or exploration issue. The motivation behind the scholastic examination could be exploratory (uncertain issue), descriptive (mindful of the issue), or explanatory (unmistakably characterized issue) (Yin, 1994; Zikmund, 2000). Saunders et al. (2000) contend that more than one reason might be utilized in a study Yin (1994) highlights that the limits between the classes are not dependably clear.

4.b Research Approaches

Quantitative versus Qualitative Research Approach
Qualitative and quantitative methods are two expansive methodologies to research, and are two research approaches frequently utilized within social science research studies. While quantitative research includes numerical representation and control perception for the reason for portraying and illustrating the phenomena that those perception reflect, qualitative research then again includes non-numerical examination and elucidation of perception with the end goal of running across the underlying importance and example of connections. Qualitative research attention the procedure and implying that are not thoroughly analyzed or measured, in term of amount, measure of force or recurrence. Interestingly, quantitative study attention estimation and investigation of causal connections between variables, not forms (Casebeer and Verhoef, 1997; Zikmund, 2000; McDaniel and Gates, 1996; Miles, 1994; Easteby-Smith, 1991). In quantitative research variables and connections are the focal thought (Neuman, 2003).

Quantitative research is suitable in giving itemized arranging preceding information accumulation and examination, on the grounds that it gave apparatuses to measuring ideas, arranging outline stages and for managing populace and examining issues. Furthermore, a quantitative research methodology uses a deductive model in testing the relationship between variables and to give confirmation to or against pre specific hypothesis (Neuman, 2003). The difference between Quantitative and Qualitative can understand through below given table:

Table 4

<table>
<thead>
<tr>
<th>Qualitative Research</th>
<th>Quantitative Research</th>
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...
This research study opts for quantitative research to discover emotional intelligence impacting the job satisfaction and organizational commitment. For attaining this, we have picked an organized system and created our research hypothesis. So the hypothesis will be tried by utilizing quantitative research system.

4.c Research Purpose
This study proposes a conceptual framework to investigate the impact of manager’s emotional intelligence on their perception towards job satisfaction and organizational commitment in manufacturing industry.

Thus, the objective of study is to increase job satisfaction and the commitment of managers towards their organization by making them comfortable with job and organization and highlighting to manufacturing industry and their problem area. With the help of this research they can remove or restructure their factors which are responsible for shortcomings and can increase satisfaction and commitment towards organizations.

4.d Objectives of Study

The broad and main purpose of this study is to explore the role of emotions at work place by investigating the relationship between Emotional Intelligence, job satisfaction and Organizational Commitment among Managers.

This research has following two objectives, primary and secondary.

- To find the impact of Manager’s Emotional Intelligence on their Job satisfaction and Organizational Commitment.

- To identify and compare the level of Manager’s Emotional Intelligence, job satisfaction and Organizational Commitment.

- To find the impact of Manager’s Emotional Intelligence on Organizational Commitment in mediation to job satisfaction.

- To analyze the impact of demography on Emotional Intelligence, Job satisfaction & Organizational Commitment.
• To give the suggestions for increasing the level of emotional intelligence, job satisfaction and organizational commitment in organizations.

• To indicate the directions for future research in the selected literature streams of emotional intelligence, job satisfaction and organizational commitment.

4.e Scope of Study:

The study covered the Manufacturing units of Gwalior & MP region which include Malanpur and Banmore Industrial area and other units in Madhya Pradesh. It includes managers in manufacturing units. The study reveals the emotional intelligence of Managers and its impact on job satisfaction and organizational commitment. As it is the part of HRM so it also helps in understanding the factors which influence the emotional intelligence of managers and their job satisfaction and organizational commitment. It will be beneficial for researchers, academicians and management. With the help of this research Managers can restructure their factors which are responsible for their Emotional Intelligence Level and can increase their Job Satisfaction and commitment towards the organization.

4.f Measurement Construct:

This research study considered following variables:

**Emotional Intelligence** is an Independent variable which includes the various components of Emotional intelligence:

(Self - Emotional Appraisal) SEA

(Others Emotional Appraisal) OEA

(Use of Emotions) UOE
(Regulation of Emotions) ROE

**Job Satisfaction and Organizational Commitment**

Here, Job Satisfaction is a mediator (mediating variable) & Organizational Commitment is the dependent variables and Emotional Intelligence is responsible for job satisfaction & organizational commitment so it will be considered as independent variable for this research. The hypothesis will determine the significant impact of Emotional Intelligence on Organizational Commitment in mediation to Job Satisfaction of managers in manufacturing units.
The variables are

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
<th>Source</th>
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<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Emotional Intelligence,</strong></td>
<td>“Managing feelings so that they are expressed appropriately and effectively, enabling people to work together smoothly toward their common goals.”</td>
<td>Goleman, Daniel. 1995. Emotional Intelligence. New York: Bantam.</td>
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<tr>
<td>which includes:</td>
<td></td>
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<tr>
<td>(Self Emotional appraisal) SEA, (Others Emotional appraisal) OEA, (Use of Emotions) UOE and (Regulation of Emotions) ROE</td>
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<tr>
<td><strong>Mediating variable</strong></td>
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<tr>
<td><strong>Job Satisfaction</strong></td>
<td>Job satisfaction is defined as &quot;A pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences&quot;. Job satisfaction includes multidimensional psychological responses to an</td>
<td>(Locke ,1976) (Hulin and Judge, 2003)</td>
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individual's job, and that these personal responses have cognitive (evaluative), affective (or emotional), and behavioral components.

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<tr>
<th><strong>Organizational Commitment</strong></th>
<th>Prior research indicated that there are three &quot;mind sets&quot; which can characterize an employee's commitment to the organization: Affective Commitment, Continuance Commitment &amp; Normative Commitment</th>
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<tr>
<td><strong>(Dependent variable)</strong></td>
<td><strong>Meyer and Allen's (1991)</strong></td>
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4.g **Research Hypothesis:**

Based on literature review we generate following hypothesis with respect to impact of Emotional Intelligence on Job satisfaction and Organizational Commitment.

**H 1:** There is a significant impact of Emotional Intelligence on Job Satisfaction for the managers of manufacturing industry.

**H2:** There is a significant impact of Emotional intelligence on organizational commitment for the managers of manufacturing industry.

**H 3:** There is a significant impact of job satisfaction on organizational commitment for the managers of manufacturing industry.

**H4:** There is a significant impact of emotional intelligence on organizational commitment in mediation to job satisfaction for the managers of manufacturing industry.

**Demographic Hypothesis**

**H5:** There is no significant difference between the Emotional Intelligence of manager’s on the basis of work experience.

**H6:** There is no significant difference between Job satisfactions of managers on the basis of work experience.

**H7:** There is no significant difference between Organizational commitments of managers on the basis of work experience.

**H8:** There is no significant difference in Emotional Intelligence of managers among different age group.
**H₀**: There is no significant difference in Job satisfaction of managers among different age group.

**H₁₀**: There is no significant difference in Organizational Commitment of managers among different age group.

4.h **Research Model: Fig 9**

![Research Model Diagram]

4.i **Research Design:**

The theoretical framework of emotional intelligence with the ability, trait, and mixed competency models has received exhaustive coverage in recent scholarly and practitioner
literature. Despite this exhaustive coverage, a substantial number of studies have approached the impact of emotional intelligence on job satisfaction and organizational commitment. However in taking this research investigates whether emotional intelligence of managers influences their job satisfaction and organizational commitment.

The aim of research design is to obtain empirical evidence to accurately accept or reject research propositions. In order to test the proposition, a mainly quantitative research approach was employed by using multiple measures. Therefore to investigate the relationship between variables, the research approach took the form of an empirical quantitative design. For the purpose of study a correlative descriptive research design was used.

4.1 a  Research Instrument

The following survey instruments are used in research:

Emotional Intelligence:

We used the Wong and Law Emotional Intelligence Scale (Law, Wong, and Song 2004; Wong and Law 2002). This 16-item self-report scale is consistent with Mayer and Salovey’s (1997)
definition of EI and has proven very reliable and valid in numerous studies in recent years (e.g., Law et al. 2008; Law, Wong, and Song 2004). Whereas the self-report approach is not the only way to measure EI (there are other scales based on managers’ and peers’ evaluations), it is today one of the most accepted (Wong and Law 2002). Only a few studies have applied a measure that is not based on self-reports (e.g., the ability measure—Mayer, Salovey, and Caruso EI Test).

Our study follows this approach, and the scale consists of four dimensions: Self—Emotions Appraisal (SEA), Others—Emotions Appraisal (OEA), Regulation of Emotion (ROE), and Use of Emotion (UOE). All of the antecedent belief constructs were measured using a five-point Likert scales with endpoints of 1 (strongly disagree) and 5 (strongly agree).

Job Satisfaction

A 10 items scale on job satisfaction was used which is developed by Scott Macdonald Peter Maclntyre (1997) which could be used in a wide range of occupational groups. The scale was significantly related to work place factors such as job stress, boredom, isolation and danger of-illness or injury. Job Satisfaction was measured using a five items measure on five-point Likert scales with endpoints of 1 (strongly disagree) and 5 (strongly agree).

Organizational Commitment

The 15 item organizational commitment scale (15 OCQ) has been developed, tested, and validated in the USA (Mowday et al. 1979). Its adaptability to other countries and other languages is necessary for sub cultural and cross-cultural research in industrial settings. A French version of the OCQ instrument was developed and assessed. Exploratory and multi-group invariance tastings were used to assess the instrument invariance with French and English
Canadian salespeople. The comparable English and French versions should facilitate future research.

All respondents were asked a total of 41 questions, excluding questions in demographic variables (Gender, Age, work experience).

4.i b Type of Research:

The study is descriptive in nature because we are following a set of procedure and we are testing a certain phenomenon through data analytics. Further the method of study is deductive in nature as we are following this sequence:

**Fig: 10**

The same sequence is being followed in research. There are three theories that are Emotional Intelligence, Job satisfaction & Organizational Commitment. Based on this theory ten hypothesis has been framed, observation is made based on data collected through questionnaires and finally confirmation of hypothesis has been done though statistical test of significance.

The effort will make to first gain some basic knowledge on management of emotions and its use at workplace along with job satisfaction and commitment towards organization through the study of previous research on emotional intelligence and also studies recent trends and working for manufacturing. It will describe Emotional Intelligence of Managers in Manufacturing Industries
in Madhya Pradesh region, and its relationship and impact on their job satisfaction and organizational commitment. The research will also describe Job satisfaction level and commitment of Managers in organization specifically, manufacturing industries in Madhya Pradesh.

4.i.c Sampling

The conventional examining strategy might be partitioned into two classes: (Saunders et al., 2000).

- Probability

- Non-probability

Probability sampling is the most generally connected with overview –based research where scientist requirements to make inductions from the specimen around a populace to answer the exploration questions or to meet research goals (Saunders et al., 2000). In probability sampling, sampling units are chosen arbitrarily. If completed legitimately, Probability sampling guarantees that the example is illustrative (Hair et al., 2003).

Non-probability sampling gives an extent of the elective system dependent upon the analyst subjective judgment (Saunders et al., 2000). In Non-probability sampling the choice of components for the example is not so much made with the point of being measurably illustrative of the populace. Rather the analyst utilizes the subjective routines, for example, particular experience, comfort; master judgment et criteria to select the components in the specimen. Thus
the probability of any components of the populace being picked is not known (Samuel et al 2003).

As per Samuel et al., 2003 most non-probability sampling methods are:

**Convenience Sampling:** Convenience sampling involves select sample members who can provide the required information and who are more available to participate in the study. Convenience sample enables the researcher to complete a large number of interviews cost effective and quickly, but they suffer from selection bias because of difference of target population (Hair et al., 2003)

** Judgment Sampling:** Researcher's judgment is utilized to select specimen components and it is included for a particular reason. A bunch of individuals who have information about a specific issue they might be chosen as specimen component. Some of the time it alluded as a purposive test on the grounds that it includes a particular reason. Judgment testing is more persuading and minimal effort contribution (Hair et al., 2003).

**Quota Sampling:** Objective of quota testing is to have a corresponding representation of the strata of the target populace for the aggregate example and the certain aspects depict the measurement of the populace (Cooper and Schindler, 2003). In Quota Sampling the research characterizes the strata of the target populace decides the aggregate size and set a share for the example components from every stratum. The finding from the sampling cannot be summed up in view of the decision of components is not done utilizing a probability sampling techniques (Samuel et al., 2003).
Target of this research is to discover Emotional Intelligence impacting Job Satisfaction and Organizational Commitment. Since, in this study it needs to sum up the effect to entire Manufacturing Industry population, so the random Sampling was picked.

**Sample Size**

The population of interest was defined as a group of Managers in Manufacturing Industry. Sample size for primary research will be 300 respondents which include, Top Level and Middle level Employees of manufacturing units.

Sample selected random sampling method through visiting the organizations and meeting with managers based on personal relations and references of others as well as email online questionnaire through Google drive.

The sample size has been determined based on the table (Annexure B)

and by using the following formula:

Equation for determining the sample size:

\[
\begin{align*}
n &= \frac{P(1-P)}{A^2/Z^2 + P(1-P)/N} \\
&= \frac{P(1-P)}{A^2/Z^2 + P(1-P)/N} \\
&= \frac{P(1-P)}{R}
\end{align*}
\]

Where:

\[
n = \text{sample size required}
\]
N= number of people in the population

P= estimated variance in population, as a decimal: (0.5 for 50-50, 0.3 for 70-30)

A = precision desired, expressed as a decimal (i.e., 0.03, 0.05, 0.1 for 3%, 5%, 10%)

Z= Based on confidence level: 1.96 for 95% confidence, 1.6449 for 90% and 2.5758 for 99%

R= Estimated Response Rate, as a decimal

4.j Data Collection

This research is based on primary as well as secondary data. The primary data is collected with the help of questionnaires. The secondary data will be collected from journals, newspapers, magazine, periodicals, web data, and published research work through various scholars.

A questionnaire was used to explore whether there is a relationship between emotional intelligence scores and scores from employee’s job satisfaction and their commitment towards their organization for a sample of 300.

This research will be a combination of descriptive and exploratory research as an effort will make to first gain some basic knowledge on Emotional Intelligence of Employees through the
study of previous research and also study job satisfaction and their commitment towards organization.

Survey was delivered by research himself and each item was explained to them. They were requested to give their responses by putting tick mark. To protect the anonymity of the respondents and promote confidentiality, there was not any questions identifying the participants like the phone or email address. In addition, to confirm the voluntary participation, a question was asked whether respondents wanted to continue participating in the survey before survey question were presented.

In order to test the survey instrument a preliminary convenience sample of 300 managers of manufacturing industry were asked to complete the survey. Out of 300 respondents only 220 respondents returned back the filled questionnaire and a total of 198 people answered all questions. The response rate is 66 % of the survey.

Area of Study:

In this research, the area selected for research will be manufacturing industry in Gwalior and Madhya Pradesh region, because here more scope available for increasing the commitment of managers towards organizations.