CHAPTER – 3
3. RESEARCH DESIGN

Research design is necessary to express the structure of the research problem and to clarify the plan of investigation used to obtain empirical evidence in relation to the problem (Kerlinger, 1986).

For the purpose of design we have employed positivist research paradigm. In this paradigm researcher concentrates himself in gaining knowledge specific to the study using various scientific methods of enquiry. These scientific methods of enquiry can be questionnaires or experiments; out of the two we have used the self-administered questionnaire method.

Then those inputs gained through questionnaire are then analyzed using statistical tools like factor reliability confirmatory factor analysis (CFA), Exploratory factor analysis (EFA), correlation regression analysis etc to test the framed hypothesis of study for in depth study and to reach a meaningful and useful conclusion.

3.2 SAMPLE DESIGN

Participants

The study was conducted in the service organizations of central India. The organizations included public sector units in Madhya Pradesh. The organizations mainly included M.P.E.B, F.C.I, L.I.C and Rural Engineering services. The research included 4 different public sectors, comprising of 300 members in all. Initially, 300 questionnaires were distributed and they all returned. A response rate of 100% was achieved. It shows a very good response rate. Babbie (1998) proposed that a response rate of 50% is adequate, a response rate of 60% is good and a response rate of 70% is considered to be very good. And the results cannot be generalized if low rate of response is not acceptable (Roth & BeVier, 1998). The size involved all level of employees in this research. Thus sample size included senior manager, mangers, executives, junior employees etc.
Sample Size

To increase confidence in the results, it would be better to have larger sample size. That is, if the researcher has generated items and is looking to conduct a developmental study to check the validity and reliability of the items, then it would be better to have the larger sample of respondents administered to the items (Hinkin & Schriesheim, 1989; Kerlinger & Lee, 2000). Thus a sample size of 300 respondents is taken to have a large sample as well as a trade off with time. In this study had six variables and sample size of approximately 300 participants for the best results of this study.

Sampling Technique

In this study judge-mental (non-probability) purposive sampling technique were used. On the ethical ground respondents were asked about their willingness to fill the this, judgmental approach only selects those respondents who were available at that time of questionnaire filling.

3.3 DATA COLLECTION DESIGN

The Measure: Likert type 5 point scales were used to measure all the variables, 1 stands for “Minimum Agreement “and 5 stands for “Maximum Agreement”.

Organization Justices Questionnaire: The variable measure included 12-items extracted from the scale developed by Abbas Ali Rastgar, Nina Poursebrahimi (2013). The scale used is both comprehensive and representative. Questionnaire includes questions on distributive justice, Procedural justice, and interactional justices. Question 1, 2, 3, 4, 5 covers Distributive justice 6, 7, 8 are regarding Procedural justice and 9, 10, 11, 12 for Interactional justice.

Employee Engagement Questionnaire: The variable was measured by using 16-items. The questionnaire was the short version of (Aligned 2008). Question 4, 15, 5, 14, 3, 9, 10, 16 are Employee Attraction and question 2, 1, 8, 6 are Performances, Profitability and question 7, 13, 12 are Profitability.
Psychological Climate Questionnaire: The variable was measured using 21-item scale proposed by Serge Gagnon, Maxime Paquet, François Courcy and Christopher P. Parker (2009). The scale measured two important dimensions of psychological climate which are creativity and integrity. Question 12, 14, 15, 13, 1 were related to Good Emphasis, Work Facilitation and question 7, 6, 8, 5, 3, 4 are related to Autonomy, Challenge, question 19, 18, 21 were related to Innovation, Justice questions 2, 1, 10 were related to Job (Importance), Role (Workload) and 11, 20, 9 were related to Role (Conflict), Role (Workload).

Job Involvement Questionnaire: The variable measure included 15-items extracted from the scale developed by Daneshwar Doobree (2009, Nov) which focused to measure the level of job involvements in the respondents so that the measure can be used statistically.

Employee Job Satisfaction Questionnaire: The variable was measured by using 12-items the questionnaire which is short version of Mosammod Mahamuda Parvin, M MNurulKabir (2011). The scale makes use of rewards, commitment to the goals of the organization to measure employee job satisfaction. First seven items were part of Pay and whereas last five items of this questionnaire were of Promotion.

Organization Commitment Questionnaire: The variable measured using 10-item scale proposed by Abdullah and Muhammad Ismail Ramay (2012). Organizational Commitment Scale, organizational commitment consists of distinguished and emotional attachment related to three forms are affective commitment, continuance commitment and normative commitment. Question part of 1, 2, 3 are affective, 4, 5, 6 continuance and question 7, 8, 9, 10 are normative commitment.
3.4 DATA ANALYSIS TOOLS

Data analysis tool which we used in analysis are as follows:

Firstly, Cronbach’s alpha reliability analysis is used to measure the (lower bound) reliability of measures of variable correlation analysis, to find the relation lines between various variables regression analysis using different measures for estimating the relationships among variables. then we made use of normality test using its vital elements skewness and kurtosis so as to ensure that normal distribution curve fits into the data collected and made use of histogram for descriptive graphical output We made use of factor analysis to discover simple patterns in the pattern of relationships among the variables; descriptive statistics to give our study descriptive and easy to understand features. We also made use of tools like EFA (Exploratory factor analysis) which is a statistical technique to understand the structure of relations between variables by reducing data to a smaller set of summary variables and then finally applied CFA (Confirmatory factor analysis) so as to confirm the structure as formed by EFA.