

# **CHAPTER II**

# **METHODOLOGY**

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This chapter outlines the research design that will be used to explore the research questions. Generally, the methodology is carved out to meet the research objectives and address data gathering problems imminent in research. The major components of this chapter are the research design, population of the study, sample, Tools, Procedure for data collection including sources of data, data collection instrument and procedure for data collection. The methods used for analysing the data from the field are also discussed in this chapter.

### **2.1 Sample**

**Population:**

Manager, supervisor, executive, and employee of manufacturing sector and service sector of Gujarat are research population.

**Description of study participants:**

- Manager and Assistant Manager
- Senior Executive and Junior Executive, supervisor and employees

**Inclusion Criteria:**

- Minimum one-year work experience in the current organization.
- Full-time employee only

**Exclusion Criteria:**

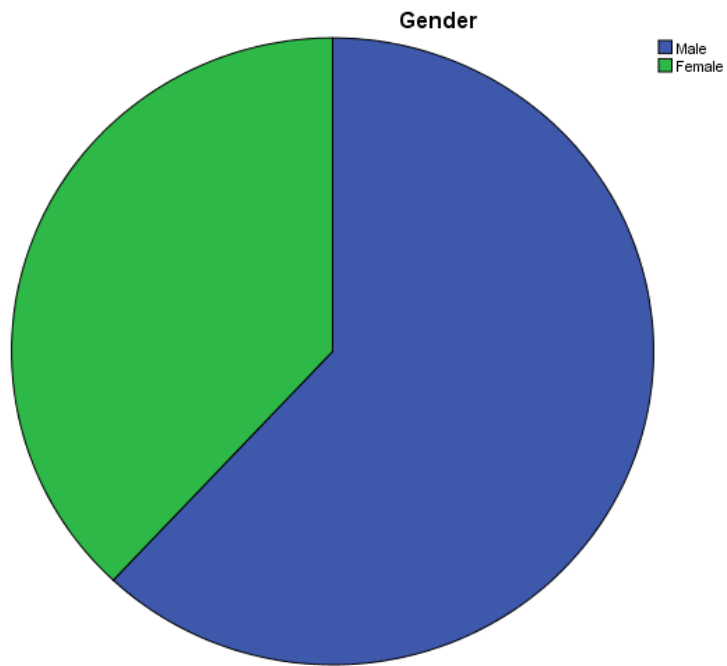
- Part-time and apprentice employees

**Sample:**

Total 405 Manager, supervisor, executive, and employee of manufacturing sector and service sector of Gujarat are taken as a sample. The sample comprises 405 managers, executives, and supervisors from private and public sectors of Gujarat which consists of 251 (62%) male employees and 154 (38%) female employees. A total of 178 (44%) employees belong manufacturing sector and 227 (56%) employees belong to the service sector. An inclusive criterion is minimum one-year work experience in the current organization as full-time employees were used to select the sample. A total of 100 (24.7%) employees have Diploma/ITI and below education, 157 (38.8%) employees have Graduate and 148 (36.5%) employees have Post-graduate and above education. 160 (39.5%) sample age are 18 to 30 years, 143 (35.3%) sample age are 31 to 40 years and 102 (25.2%) sample are 41 years and above age. Out of the total sample, 214(52.8%) sample designation is employee, 93(23%) sample designation is executive, 74 (18%) sample designation is supervisor, and 24(5.9%) sample designation is a manager. A total of 264 (65.2%) employees have 2 years to 5 years of work experience in current organization and 141 (34.8%) employees have 6 years and above years of work experience in the current organization. A total of 159 (39.3%) employees have 2 years to 5 years of work experience and 246 (60.7%) employees have 6 years and above years of work experience. A total of 79 (19.5%) employees are single, 312 (77%) employees are married and 14 (3.5%) employees are divorced and single.

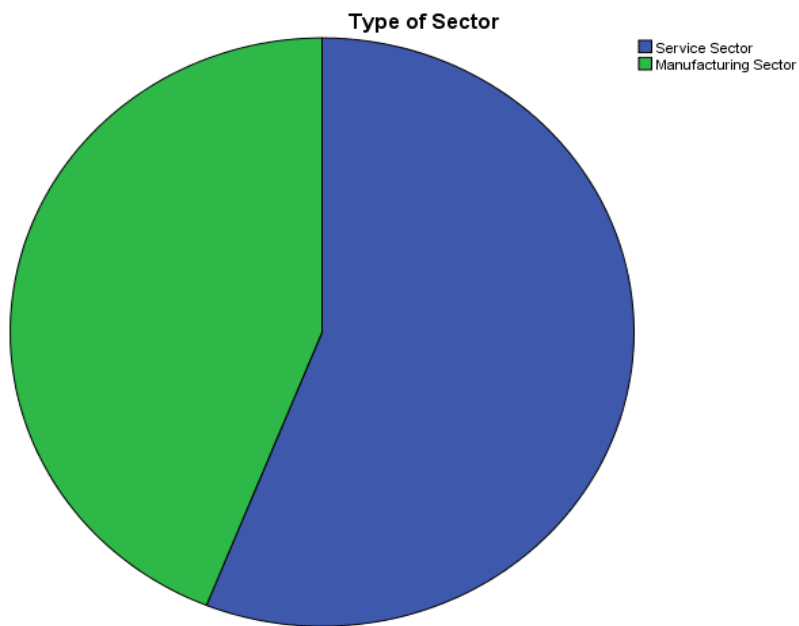
Sample are divided based on different demographical variables name gender, age, sector, experience, designation education, etc

*Figure: 2.1 Sample break on the basis of Gender*



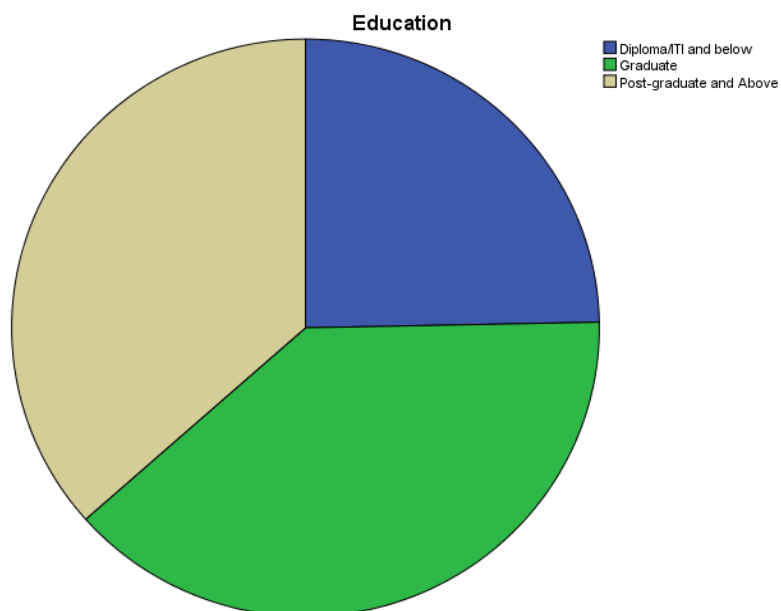
A total of 251 (62%) samples are male employees and 154 (38%) samples are female employees.

*Figure: 2.2 Sample break on the basis of sector*



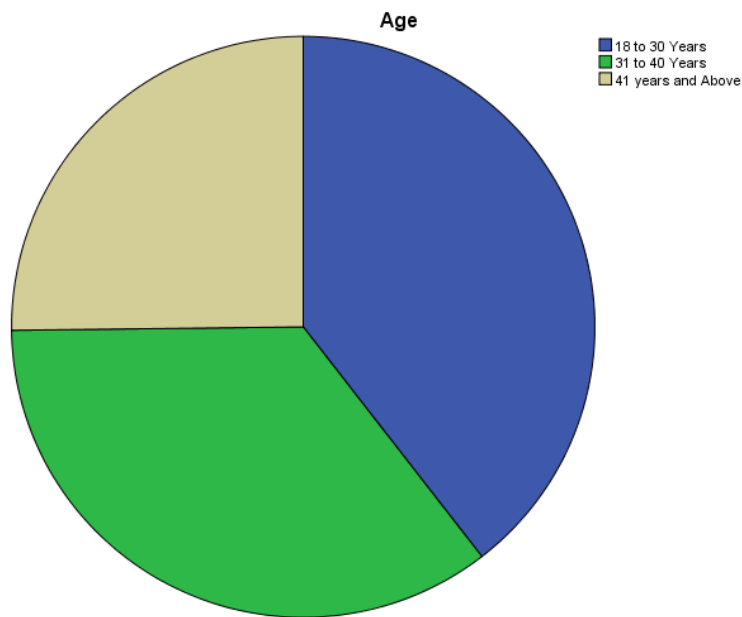
A total of 178 (44%) employees belong manufacturing sector and 227 (56%) employees belong to service sector.

*Figure: 2.3 Sample break on the basis of sample educational qualification*



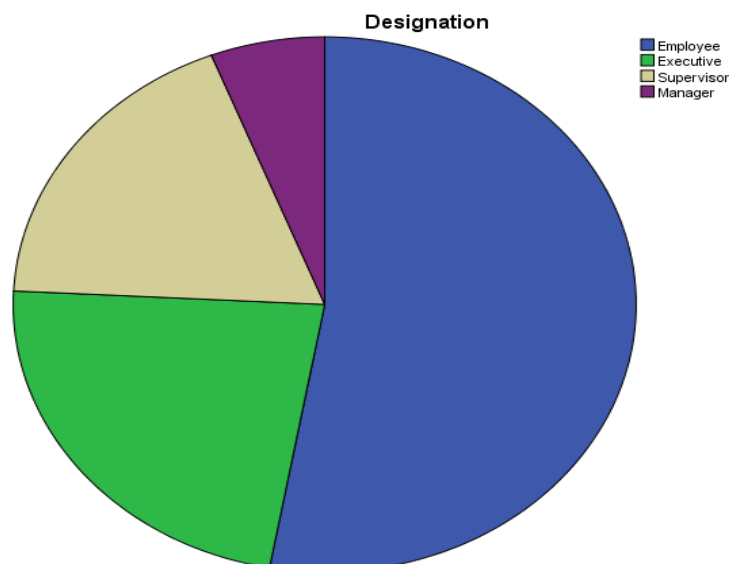
A total of 100 (24.7%) employees have Diploma/ITI and below education, 157 (38.8%) employees have Graduate and 148 (36.5%) employees have Post-graduate and above education.

*Figure: 2.4 Sample break on the basis of age*



160 (39.5%) sample age are 18 to 30 years, 143 (35.3%) sample age are 31 to 40 years and 102 (25.2%) sample are 41 years and above age.

*Figure: 2.5 Sample break on the basis of designation*



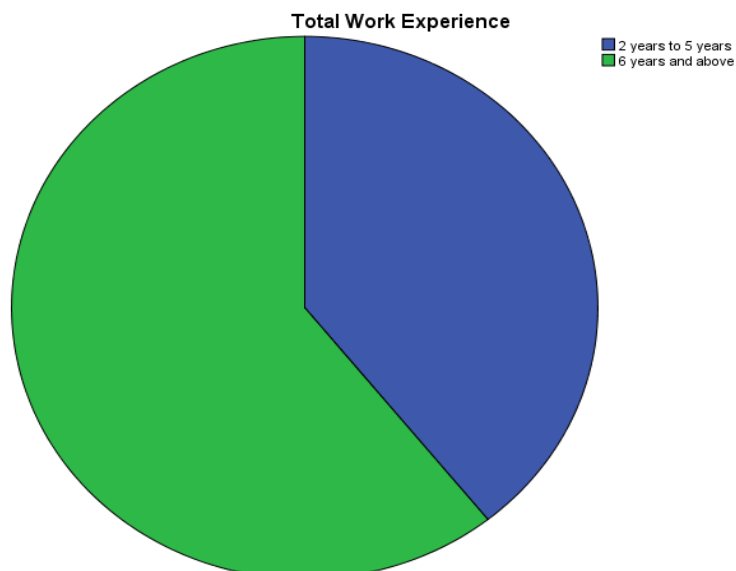
Out of the total sample, 214(52.8%) sample designation is employee, 93(23%) sample designation is executive, 74 (18%) sample designation is supervisor, and 24(5.9%) sample designation is the manager.

*Figure: 2.6 Sample break on the basis of work experience in current organization*



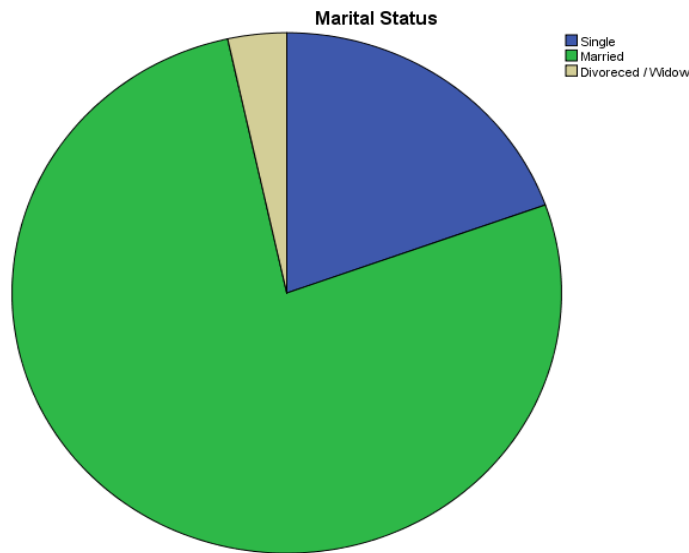
A total of 264 (65.2%) employees have 2 years to 5 years of work experience in current organization and 141 (34.8%) employees have 6 years and above years of work experience in the current organization.

*Figure: 2.7 Sample break on the basis of total work experience*



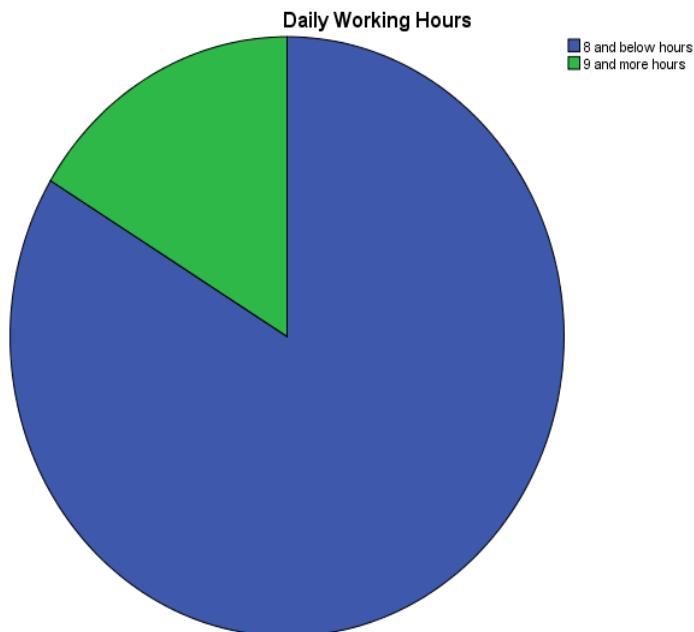
A total of 159 (39.3%) employees have 2 years to 5 years of work experience and 246 (60.7%) employees have 6 years and above years of work experience.

*Figure: 2.8 Sample break on the basis of marital status*



A total of 79 (19.5%) employees are single, 312 (77%) employees are married and 14 (3.5%) employees are divorced and single.

*Figure: 2.9 Sample break on the basis of daily working hours*



A total of 339 (83.7%) employees work 8 and less hours daily and 66 (16.3%) employees work 9 and more hours daily.

## 2.2 Tools

A survey questionnaire was used for data collection. The questionnaire has the following subscales.

***Green Human Resource Management Practices:*** Green Human Resource Management Practices were measured by a scale that was developed by the researcher based on parameters of Green Human Resource Management Practices. The scale was face validated by experts. Five points Likert's scale was used to collect quantitative Information in which 1 stands for never and 5 for always and it consists of 25 items. The Chronbach Alpha for the scale on sample of the reserach is 0.94.

***Perceived Corporate Social Responsibility:***

Perceived Corporate Social Responsibility scale was developed by Turker (2009). There were 10 items of the scale used to measure Perceived Corporate Social Responsibility. Five points Likert's scale was used to collect quantitative Information in which 1 stands for strongly disagree and 5 for strongly agree. The Chronbach Alpha for the scale on sample of the reserach is 0.87.

***Work Engagement:***

The Utrecht Work Engagement Scale (UWES) is developed by Schaufeli & Bakker (2003). The following are the dimensions used in this scale are Vigour, dedication and, absorption. It consists of 17 items which are to be rated on a 5-point scale ranging from 0 (strongly disagree) to 5 (strongly agree). Its current reliability of the scale on sample of the reserach is 0.89 in which reliability of vigour is 0.75, Dedication is 0.71 and Absorption is 0.75.

***Organizational Citizenship Behavior:***

Organizational Citizenship Behaviour scale used in the study was developed by Williams and Anderson (1991). This scale includes 7 items that measure OCBs directed at other individuals ( $\alpha=.79$ ) and 7 items that measure OCBs directed at the organization ( $\alpha=.63$ ). Participants indicated the extent to which they perform this behaviour on a 5- point Likert scale (1=strongly disagree to 5= strongly agree). Its reliability measured from the current sample is



0.83 in which reliability of OCB individual level is 0.78 and OCB Organization level is 0.80. There are three reverse item in scale, items number 3,4 and 5 scored 5 to 1 in which (5=strongly disagree to 1= strongly agree).

### ***Employee Retention:***

Employee Retention scale was developed by Egan, Yang & Bartlett (2004). There are 9 items in Employee retention scale. Reliability of original scale was 0.91. Five points Likert's scale was used to collect quantitative Information in which 1 stands for strongly degree and 5 for strongly agree. Its current reliability is 0.68. There is five reverse items in scale, items number 1, 3, 5, 6 and 9 scored 5 to 1 in which (5=strongly disagree to 1= strongly agree).

The survey questionnaire was prepared in English language and Gujarati language. Dimensions wise detail of survey questionnaire given in below table;

*Table No. – 2.1 Dimensions wise detail of survey questionnaire*

Sr. No.	Variables	Dimensions	Number of items measured on 5 points scale	Range of Score	Reliability of current research (Chronbach Alpha)
1.	Green Human Resource Management Practices	Green Human Resource Management Practices	25 items	25 - 125	0.94
2	Perceived Corporate Social Responsibility	Perceived Corporate Social Responsibility	10 items	10 – 50	0.87
3	Work Engagement- The Utrecht Work Engagement Scale (UWES)	Vigour	6 (Item No. 1,4,8,12,15, 17)	6-30	0.75
		Dedication	5 (Item No. 2,5,7,10,13)	5- 25	0.71
		Absorption	6 (Item No. 3,6,9,11,14,	6-30	0.75

			16)		
4	Organizational Citizenship Behavior(OCB)	Individual OCB(OCBI)	7 ( Item No. 8,9,10,11,12, 13,14)	7-35	0.78
		Organizational OCB(OCBO)	7 ( Item No. 1,2,3,4,5,6,7 - Reverse items- 3,4,5)	7-35	0.80
5	Employee Retention	Employee Retention	9 items (Reverse items- 1,3,5,6,9)	9-45	0.68

## 2.3 Research Design

2 X 2 factorial design was used where one factor is types of sector (manufacturing sector and service sector) and second factor is gender (male and female). 2 X 2 factorial design presented in the following Table;

*Table 2.2: Research design- 2 X 2 factorial design*

Independent Variables <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">→</div> <div style="text-align: center;">↓</div> </div>		Types of sector	
		Manufacturing (N= 178)	Service (N= 227)
Gender	Male (N= 251)	Male Manufacturing (137)	Male Service (114)
	Female (N= 154)	Female Manufacturing (41)	Female Service (113)

Table 2.2 shows that the research used 2 X 2 factorial design and a survey method was used. A survey questionnaire was used for data collection. Based on GHRM parameters, a questionnaire was developed to measure GHRM practices. The questionnaire for the research included the following standardized scales used in previous research: the Perceived Corporate Social Responsibility Scale, Organizational Citizenship Behaviour Scale, Utrecht Work Engagement Scale, and Employee Retention Scale. Data were collected online (Google form) and in hardcopy. The collected data were analyzed using the appropriate statistics.

## **2.4 Procedure**

The Green Human Resource Management Practices scale was developed by the researcher based on GHRM parameters. Researcher prepared a GHRM questionnaire on the basis of established parameters of GHRM in early studies to assess the GHRM practices. The standardized scales (Perceived Corporate Social Responsibility Scale, Organizational Citizenship Behaviour Scale, Utrecht Work Engagement Scale, and Employee Retention Scale) were borrowed from previous research. The survey questionnaire was prepared in English and was also translated into Gujarati. The questionnaire was translated into Gujarati and back translated into English to establish transliterational equivalence. Permission for data collection was taken from the concerned manufacturing- and service-sector organizations. After permission was granted, the participating employees were briefed about the study. The survey questionnaire was then given to those employees who met the research criteria and the data were collected. Ethical Informed consent was taken from the sample before collecting data and instructed the sample that your data would be remain confidential.

## **2.5 Statistical Analysis:**

The survey questionnaire was used to collect data and applied various statistical to analyze it. Structural Equation Modelling (SEM) was used to study whether Green Human Resource Management practices and perceived Corporate Social Responsibility significantly predict or affect Workplace behaviour of employees (Organizational Citizenship Behaviour, Employee Engagement, and Employee Retention). Pearson Product Moment correlation was used to study correlation among Green Human Resource Management practices, perceived Corporate Social Responsibility, Employee Engagement, Organizational Citizenship Behaviour, and Employee Retention. Regressing analysis was used to study whether Green Human Resource Management practices and perceived Corporate Social Responsibility significantly predict or affect Workplace behaviour of employees (Organizational Citizenship Behaviour, Employee Engagement, and Employee Retention). Two ways Analysis of Variance (Two ways ANOVA) was used to explore the main and interaction effect of employee's gender, age, sector, and employee's education on Green Human Resource Management Practices, Perceived Corporate Social Responsibility, Employee Engagement, Organizational Citizenship Behaviour, and employee retention. Independent t-test was used to study the effect of employee's years of experience on Green Human Resource Management practices, perceived Corporate Social Responsibility, Employee Engagement, Organizational

Citizenship Behaviour, and Employee Retention. Intensity index was used to study the barriers and positive outcomes of GHRM practices.