METHODOLOGY

2.1 Sample

2.1.1 Sample Characteristics- Irrespective of age, gender, educational qualification, work experience and specialization, the sample requirement for the study was five employees from each organization. The criterion for the sample employees was that they should be reporting to the same leader. Employing the technique of 'ad hoc quota' non-probability sampling, five employees reporting to a common leader were selected as sample for the study.

Five employees each were selected from 80 organizations, thereby making the total sample size of 400 employees.

2.1.2 The Sample Organizations- The organizational sample for the study comprised of a total of 80 organizations. The organizational sample can be broadly classified into four sectors-
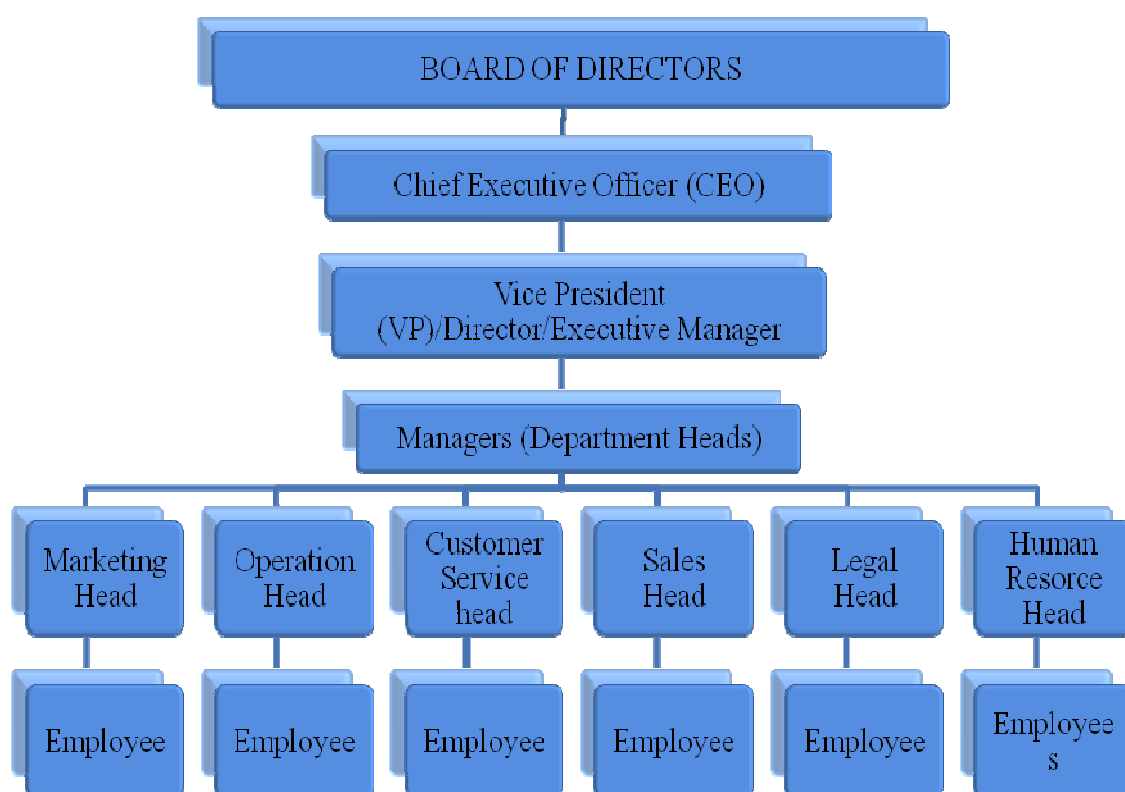(i)   The Corporate Sector
(ii)   The Education Sector
(iii)   The Development Sector
(iv)   The Law Enforcement Sector

Since the focus of the study was to understand the gender congeniality of organizations, the sampling technique of 'quota sampling' was employed to select two organizational sectors (the corporate sector and the law enforcement sector) that are male-dominated, that is, having a greater occupancy of male employees as compared to their female counterparts; and two organizational sectors (the education sector and the development sector) that have an equal or greater occupancy of female employees as compared to their male counterparts. Under each sector, 20 organizations were selected as sample organizations for the study.

(i).   The Corporate Sector- Organizations functioning as manufacturing units and falling under the category of large-scale industries were selected as sample organizations under the Corporate Sector. 20 private sector organizations situated within Vadodara district represented as the sample. In economical sense, the private sector is that segment of the economy that is not controlled

by state but is run by private individuals or groups, usually as a means of enterprise for profit.

Organogram of the corporate sector


Figure 2.1Organogram of the Corporate Sector

(ii).   The Education Sector- Institutions offering higher education were selected as sample organizations under the Education Sector. 20 educational institutions were selected, 12 public organizations and 8 private organizations. 8 faculties and 4 educational centers of The Maharaja Sayajirao University of Baroda were selected under public organizations. The private educational institutions were the various private colleges situated in the city of Vadodara. The average staff size of these educational institutions ranged from 20-40.

Organogram of the Education Sector - Public
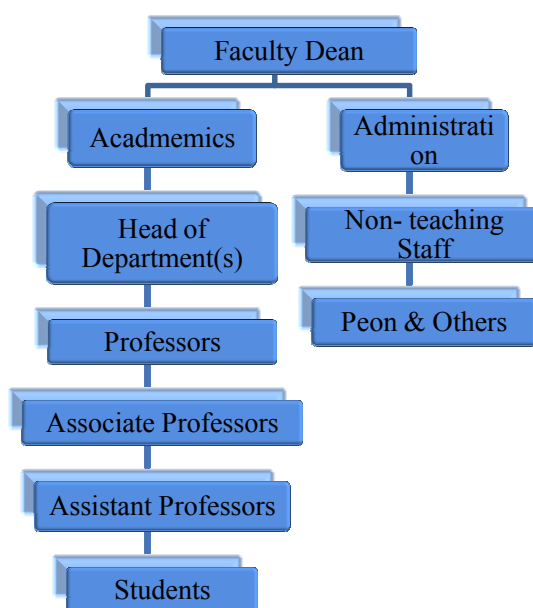

Figure 2.2 Organogram of the Education Sector- Public

Organogram of the Education Sector -Private
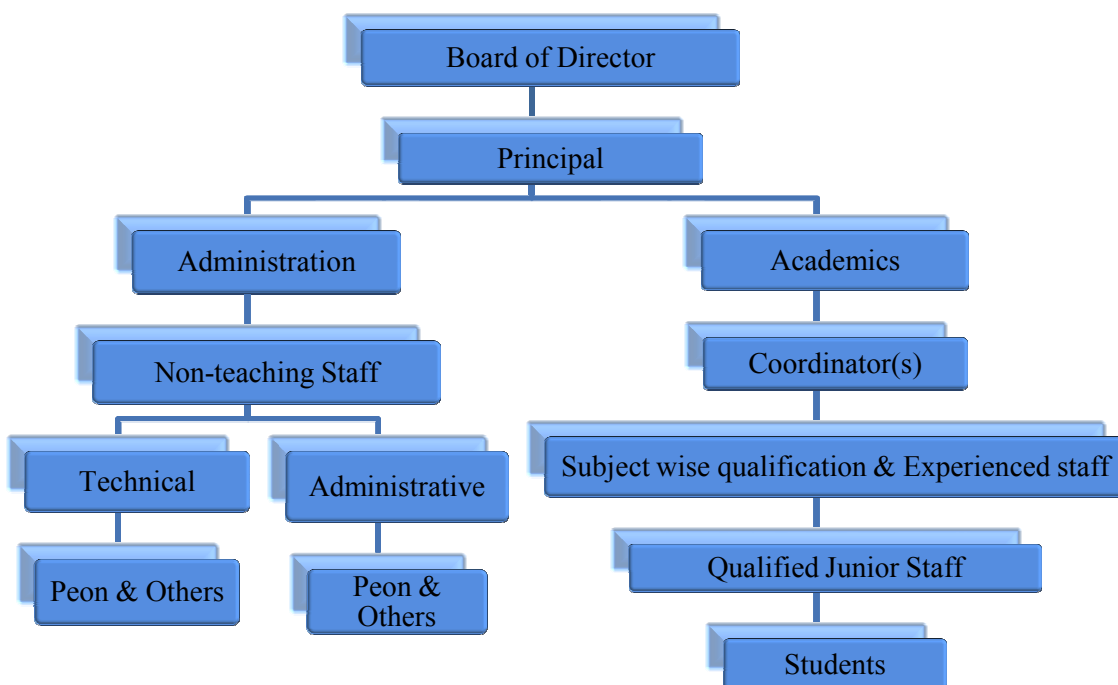
Figure 2.3 Organogram of the Education Sector- Private

(iii).   The Development Sector- The non-profit non-government organizations (NGOs) situated within Vadodara city, were selected as sample organizations under the Development Sector. 20 NGOs were selected, whose centers were located within the city of Vadodara, engaged in varied social and community services. These non-profit charitable organizations can be broadly classified based on the services they offer, that is, disability, women's health and welfare, health and family welfare, rural upliftment, children and environment issues. The sample NGOs selected for the study were 5 NGOs serving the disabled, 3 NGOs focusing on women's health and welfare, 5 NGOs engaged in health and family welfare, 3 NGOs engaged in rural upliftment programmes, 1 NGO focusing on environmental issues, and 3 NGOs engaged in multiple social services.
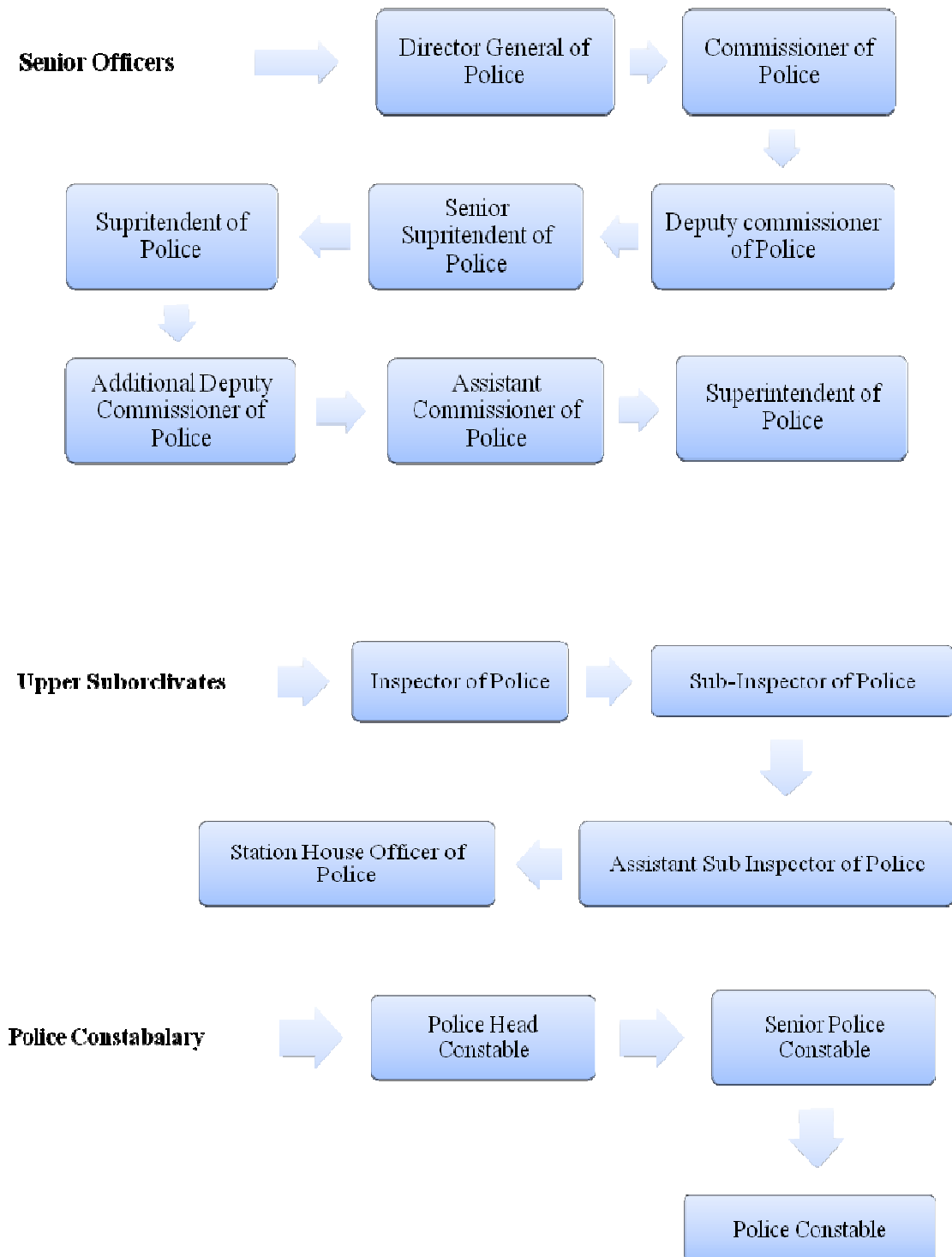
Organogram of the Development Sector
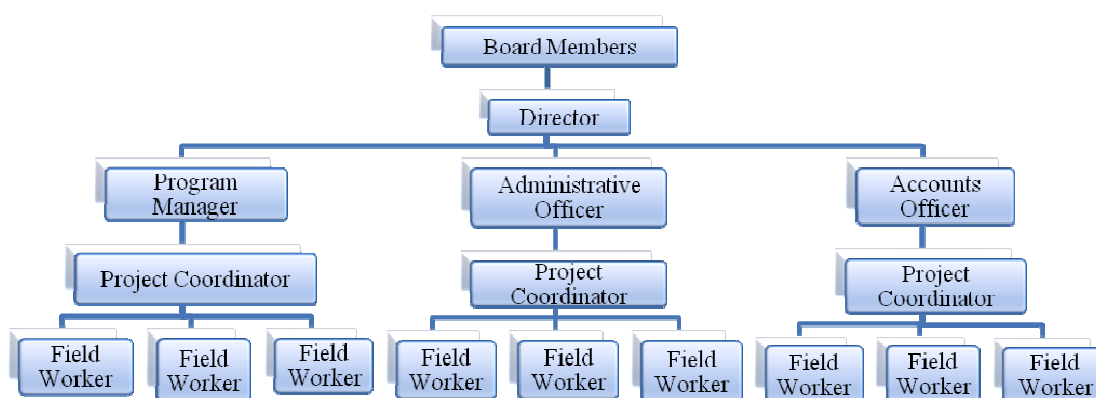
Figure2.4 Organogram of the Development Sector

(iv).   The Law Enforcement Sector- The Indian Police Service of Vadodara City and Vadodara District were selected as sample organizations under the law enforcement sector. A total of 20 police stations were selected under this sector. A police station is typically a building which serves to accommodate police officers, and required to serve and protect the area where it is situated, or serve any specific function such as crime branch, traffic police, railway police station and the like. 5 police stations under the jurisdiction of the Commissioner of Police of Vadodara district, 8 police stations and 7 special branches under the jurisdiction of the Commissioner of Police of Vadodara

city represented as sample police stations for the study. The average staff size of the sample police stations was 20.

<u>Organogram of Indian Police Service</u>

Senior Officers → Director General of Police → Commissioner of Police

Deputy commissioner of Police → Senior Supritendent of Police → Supritendent of Police

Supritendent of Police → Additional Deputy Commissioner of Police → Assistant Commissioner of Police → Superintendent of Police

Upper Subordivates → Inspector of Police → Sub-Inspector of Police

Sub-Inspector of Police → Assistant Sub Inspector of Police → Station House Officer of Police

Police Constabalary → Police Head Constable → Senior Police Constable → Police Constable

Figure 2.5 Organogram of the Law Enforcement Sector

2.1.3 The Sample Respondents

A total sample of 400 employees, out of which 277 male employees and 123 female employees served as employee respondents of the study. A sector-wise break-up of male and female employees is shown below:
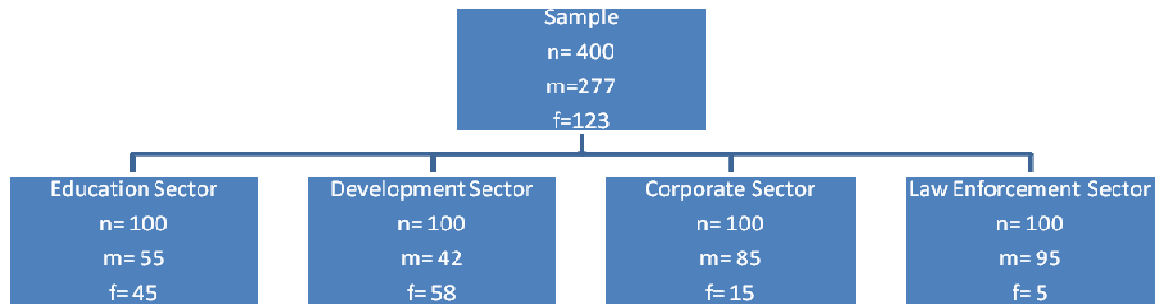
Figure: 2.6 Sector-wise break-up of male and female employees

The above figure clearly shows that the male dominated organizations (i.e. the corporate sector and the law enforcement sector) had a lower ratio of female occupants as compared to the female dominated organizations (i.e. the education sector and the development sector). The female employees were highest in number in the Development sector (f = 58, m = 42), and almost equal to their male counterparts in the Education sector (f = 45, m = 55). The Corporate sector (where, f = 15, m = 85) and the Law Enforcement sector (where, f = 5, m = 95) showed a clear dominance of male employees over their female counterparts.

The highest number of employees fall within the age group of 26 to 40 years (n = 188), followed by 155 employees in the age group of 41 to 55 years. The two age groups, below 25 years (n= 28) and above 56 years (n=29) had an almost equal number of employees.
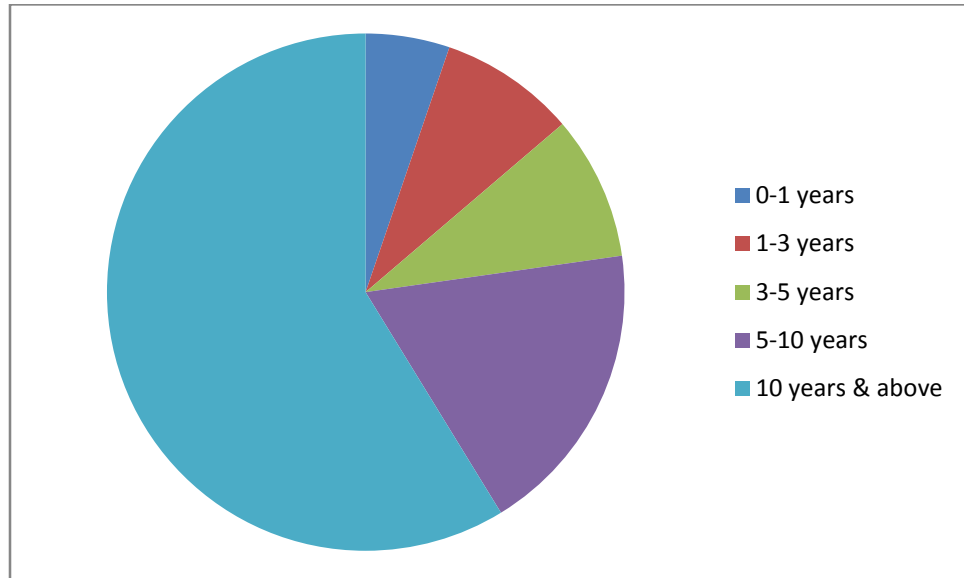
Figure 2.7 showing a break up of work experience of employees in years.

The above figure clearly reveals that more than half of the sample employees have work experience of ten or more than ten years. The average number of years that the sample employees have spent in the current organization is 3 to 5 years (mean= 3.20) and the average number of years that the sample employees have spent in the current position is 1 to 3 years (mean=2.95).

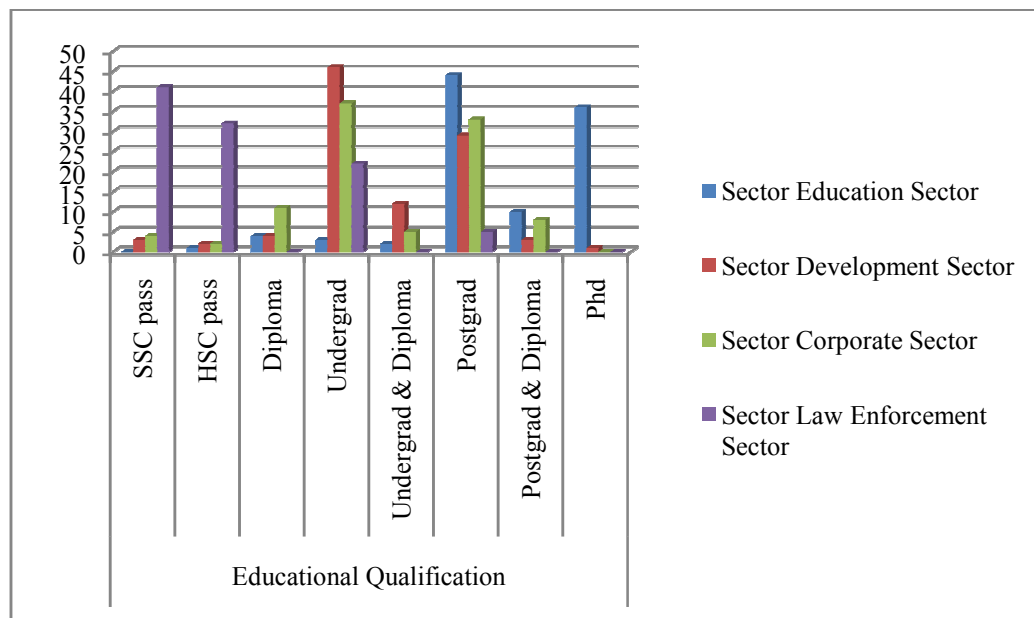Figure 2.8 *Educational qualification of sample across organizational sectors*

Figure 2.8 indicates that the highest degree of educational qualification has been attained by the employees of the education sector. Logically this makes sense, since

having a post graduate and/or a doctorate degree is mandatory for lecturers/ teachers offering higher education services. The lowest educational qualification is attained by those in the law enforcement sector, where after clearing either the higher secondary class or the senior secondary class, people enroll themselves into the police service. Sample employees of the development sector have the minimum qualification of an undergraduate degree where some have moved further to attain a post graduate degree or diploma at undergraduate or postgraduate level. A similar pattern is observed in employees of the corporate sector.

2.2 Measures

The questionnaire comprises of five sections, presenting the selected tools to be used. The tools used for the study are standardized instruments that have been further modified to suit the purpose of the study.

2.2.1 Demographic Information: Data was procured on demographic characteristics of age, gender, educational qualification, occupational position and specialization, work experience (in years), number of years in current organization and current position, and gender and designation of the leader. Each respondent was assured of the confidentiality of the results.

2.2.2 Organizational Health Description Questionnaire (Haseen Taj, 2000). Originally adapted and standardized in Gujarati, the tool was translated into English by four experts fluent in English and Gujarati languages both. The final translated items of the tool were classified under ten internal components of three dimensions of organizational health. The tool measures three dimensions, namely (1). Task centered dimensions, (2).Maintenance needs dimensions, and (3). Growth & changefulness dimensions. The three task centered dimensions are (i). Goal focus, (ii). Communication adequacy and (iii). Optimal power equalization; three maintenance needs dimensions are (iv). Resource utilization (v). Cohesiveness and (vi). Morale; and the four growth and changefulness dimensions are (vii). Innovativeness (viii). Autonomy (ix). Adaptation (x). Problem solving adequacy. The questionnaire contains 40 statements, and responses are made on a 5-point scale ranging from Completely agree (5), Great extent (4), Some extent (3), Very little extent (2), to Disagree (1).

The test-retest reliability coefficient of OHDQ is .73 and split-half reliability coefficient is .89. In order to make the respondent's task less cumbersome, few items have been eliminated from the original scale, and reduced to a total of 30 items in the OHDQ.

Description of Important terms: As operationalized by Miles (1973), the term 'Organizational Health' has been described as "a set of fairly durable and secondary systems properties which send to transcend short term effectiveness". The dimensions of OHDQ are described as follows:

i.   Goal Focus- In a healthy organization, the goal(s) of the system would be reasonably clear to the system members, and reasonably well accepted as well as achievable with the existing available resources.

ii. Communication Adequacy- A healthy organization has relatively distortion free communication "vertically", "horizontally" and across the boundary of the system, and there is good and prompt sensing of internal strains.

iii. Optimal Power Equalization- In a healthy organization, the distribution of influence is relatively equitable; keeping the inter-group conflict to the minimum, the basic stance of members of the organization is that of collaboration, and the units of the organization have an inter-dependent relationship to each other.

iv. Resource Utilization- A healthy organization is one where its personnel resources are used effectively. The system's coordination is such that the members are neither overloaded nor idling, and they feel reasonably 'self-actualized' in the process of contributing to the organization.

v.   Cohesiveness- The members of a healthy organization feel attracted to its membership, want to stay with it, be influenced by it and exert their influence on the organization in a collaborative style.

vi. Morale- At the organizational level, the term 'morale' refers to "a summated set of individual sentiments, centering around feelings of well-being, satisfaction and pleasure, as opposed to feelings of discomfort, unwished for strain and dissatisfaction."

vii. Innovativeness- "A healthy system would tend to invent new procedures, move toward new goals, produce new kinds of products, diversify itself, and become more rather than less differentiated over time."

viii. Autonomy- A healthy organization would neither be passive nor aggressive towards the demands of the environment. It would have a kind of independence from the environment.

ix. Adaptation- A healthy organization has a realistic, effective contact with the surroundings; and in case of changes in the local system, the organization has sufficient stability and stress tolerance to manage the difficulties which occur during the adaptation process.

x. Problem-solving adequacy- A healthy organization has well developed structures and procedures for sensing the existence of problems, for inventing possible solutions, for deciding on the solutions, for implementing them, and for evaluating their effectiveness.

2.2.3 Leadership Effectiveness Scale (Haseen Taj, 2010). The scale provides a technique by which the group members are able to describe the effectiveness of the designated leader in formal organizations. The six major aspects of leadership effectiveness that are measured are: (i). Interpersonal Relations (ii). Intellectual Operations (iii). Behavioral and Emotional Stability (iv). Ethical and Moral Strength (v). Adequacy of Communications and (vi). Operation as a Citizen. With a total of 79 items, the scale contains both positive and negative items. The respondents are asked to indicate the behavior of their group leader against five points, ranging from Always (5), Often (4), Occasionally (3), Rarely (2), to Never (1). For all negative items, the scoring was reversed, ranging from 1 to 5, adding up the score against each item, the total score of a respondent could range from 79 to 395.

Reliability for the scale was established on a population of group members from different organizations such as educational and industrial organizations from the city of Bangalore. The test-retest reliability coefficient was .77, and split-half reliability for odd and even method was .78 and for the first half vs. second half method, it was .80.

Operationalization of Important terms

Chester (1962) defines leadership effectiveness as "effectiveness is the accomplishment of the recognized objectives of the cooperative action." Stogdill (1974) defines effective leaders as, "Effective, as compared to ineffective, leaders perceive themselves as letting subordinates know what is expected of them, informing them of policy changes, explaining reasons for decisions, and getting group reactions before going ahead with a new plan."

Agreeing that there are no universal traits for effective leaders, the following requirements for leadership effectiveness tend to exist across diverse situations:

i. Interpersonal Relations- 'Leadership effectiveness depends upon followers perceiving and responding to the leader's display of competence, fairness and identification.'

ii. Intellectual Operations- 'The most effective leaders appear to exhibit a greater degree of versatility and flexibility that enables them to adapt their behavior to the changing and contradictory demands made on them.'

iii. Behavioral and Emotional Stability- The leader should possess predictable behavior (regularity and practicability of behavior) and emotional stability (calmness and self-confidence) to exhibit effective leadership.

iv. Ethical and Moral Strength- 'A leader with ethical and moral strength is one who is fully committed to the goals of the organization and his/her role in accomplishing these goals. The leader should serve as a behavior model for the group members.'

v. Adequacy of Communications- 'Effective leadership uses communication to get people committed to a joint activity with a common plan.'

vi. Operation as a Citizen- 'An effective leader should be a friendly liaison officer between the organization and the community. He should adapt in fostering good public relations, securing community participation for improving and developing the institution, making institution conscious of the need to serve the community better.'

2.2.4 Downward Influence Strategies (DIS) Scale: By Sudipa Nag, Sonia Nongmaithem, & Nachiketa Tripathi (2008). Items for the scale are taken from various sources available in current literature (e.g. Falbo, 1977; Kipnis et al, 1980). The scale comprises of 38 items measuring the downward influence strategies of rationality, assertiveness, ingratiation, use of sanctions- both positive and negative, showing expertise, personalized relations, and exchange of benefits. It is a 7-point scale and respondents are to score from Always (7), Almost always (6), Usually (5), Sometimes (4), Seldom (3), Almost never (2), to Never (1).

Reliability Coefficient obtained from sample under male boss ranges from .51 to .81 and under female bosses ranges from .54 to .82. In order to make the respondent's task less cumbersome, few items have been eliminated from the original scale, and reduced to a total of 33 items in the DIS Scale. Also, the scoring categories have been reduced to a 5-point scale, from Always (5), Usually (4), Sometimes (3), Seldom (2), to Never (1).

Description of Downward Influence Tactics:

i.   Assertiveness- where the agent keeps on insisting and demanding for something from the target.

ii. Rationality- use of logical arguments and factual evidence to influence the target.

iii. Ingratiation- The agent gets the target in a good mood before asking for something.

iv. Sanctions- The use of positive (rewards, perks, compliments) and negative (punishment, withdrawal of benefits, harsh remarks) sanction by the agent to influence the target.

v.   Exchange of Benefits- The agent makes an explicit or implicit promise that the target will receive tangible benefits of the target complies with a request; or the agent reminds the target of a prior favor to be reciprocated.

vi. Expertise- where the agent's knowledge and expertise in the field works to influence the target to get the work done.

vii. Personalized Relations- where the agent influences the target to get work done based on the personal relations of friendship.

2.2.5 **The Adjective Checklist:** For the present study, in order to measure gender stereotypes existing in the workplace, items were selected from the BSRI. The Bem Sex-Role Inventory (BSRI), as constructed by Sandra Ben (1974) contains 60 items in form of traits; 20 masculine, 20 Feminine, and 20 Neutral items. 9 masculine traits, 9 feminine traits, and 12 neutral traits were selected and a random list of 30 adjectives was prepared. Below the adjective checklist, two tables are drawn, one for adjectives to describe a typical male leader and another to describe a typical female leader. Respondents were required to select any five adjectives from the list of 30 adjectives, to describe a typical male leader and any five adjectives to describe a typical female leader. Once selected, the adjectives were to be rank ordered in the table given, in terms of their appropriateness

TABLE 2.1

Items on the Masculinity, Femininity, and Social Desirability Scales of the

Bem Sex-Role Inventory

MASCULINE	NEUTRAL	FEMININE
Acts as a leader (49)	Adaptable (51)	Affectionate (11)
Aggressive (46)	Conceited (36)	Cheerful (5)
Ambitious (58)	Conscientiousness (9)	Childlike (50)
Analytical (22)	Conventional (60)	Compassionate (32)
Assertive (13)	Friendly (45)	Does not use harsh language (53)
Athletic (10)	Happy (15)	Eager to soothe hurt feelings (35)
Competitive (55)	Helpful (3)	Feminine (20)
Defends own beliefs (4)	Inefficient (48)	Flatter able (14)
Dominant (37)	Jealous (24)	Gentle (59)
Forceful (19)	Likable (39)	Gullible (47)
Has leadership abilities (25)	Moody (6)	Loves children (56)
Independent (7)	Reliable (21)	Loyal (17)
Individualistic (52)	Secretive (30)	Sensitive to needs of others (26)
Makes decisions easily (31)	Sincere (33)	Soft spoken (38)
Masculine (40)	Solemn (42)	Sympathetic (23)
Self-reliant (1)	Tactful (57)	Tender (44)
Self-sufficient (34)	Theatrical (12)	Understanding (29)
Strong personality (16)	Truthful (27)	Warm (41)
Willing to take a stand (43)	Unpredictable (18)	Yielding (2)
Willing to take risks (28)	Unsystematic (54)	Shy (8)

Note. The number preceding each item reflects the position of each adjective as it actually appears on the Inventory.

TABLE 2.2

The modified adjective checklist used for the present study

MASCULINE	NEUTRAL	FEMININE
Independent (1)	Secretive (4)	Understanding (2)
Willing to take a stand (3)	Sincere (5)	Childlike (7)
Willing to take risks (8)	Unsystematic (6)	Warm (9)
Masculine (10)	Jealous (11)	Soft spoken (15)
Assertive (14)	Conscientious (12)	Loyal (16)
Analytical (17)	Conventional (13)	Yielding (20)
Aggressive (21)	Unpredictable (18)	Feminine (22)
Ambitious (24)	Truthful (19)	Cheerful (23)
Makes decisions easily (25)	Moody (26)	Does not use harsh language (27)
	Adaptable (28)	
	Conceited (29)	
	Reliable (30)	

Note. The number preceding each item reflects the position of each adjective as it actually appears on the Inventory.

TABLE 2.3

Description of the tools used for the study

VARIABLES	NUMBER OF ITEMS	RANGE	CRONBACH ALPHA
1. ORGANIZATIONAL HEALTH	30	30-150	
1.1 Goal Focus	3	3-15	.61
1.2 Communication Adequacy	3	3-15	.65
1.3 Optimal Power Equalization	3	3-15	.75
1.4 Resource Utilization	3	3-15	.68
1.5 Cohesiveness	3	3-15	.54
1.6 Morale	3	3-15	.57
1.7 Innovativeness	3	3-15	.78
1.8 Autonomy	3	3-15	.73
1.9 Adaptation	3	3-15	.58
1.10 Problem Solving Adequacy	3	3-15	.78
2. LEADERSHIP EFFECTIVENESS	48	48-240	
2.1 Interpersonal Relations	11	11-55	.84
2.2 Intellectual Operations	5	5-25	.66
2.3 Behavioral & Emotional Stability	8	8-40	.50
2.4 Moral & Ethical Strength	10	10-50	.76
2.5 Adequacy of Communication	7	7-35	.61
2.6 Operation as a Citizen	7	7-35	.84
3. DOWNWARD INFLUENCE TACTICS	3		
3.1 Rationality	5	5-25	.68
3.2 Ingratiation	5	5-25	.75
3.3 Exchange of Benefits	4	4-20	.73
3.4 Expertise	4	4-20	.58
3.5 Personalized Relations	2	2-10	.45
3.6 Assertive	5	5-25	.59
3.7 Sanctions-positive	4	4-20	.50
3.8 Sanctions-negative	4	4-20	.78

2.3 Procedure

Adopting the technique of stratified quota sampling, the population of the study was divided into four sectors- Corporate, Education, Development, and Law Enforcement. As the research proposes to testify employee perceptions of leadership effectiveness, downward influence tactics, organizational health, and gender stereotypes of leaders; five employees reporting to one single leader were selected from each organization.

Pilot Study

A preliminary study was carried out on ten organizations under education sector and ten organizations under corporate sector, located within Vadodara District. This pilot study was carried out to evaluate feasibility, time and effect size (statistical variability) to ensure the appropriateness of the sample size and make necessary modifications in the research design before the actual commencement of full-scale data collection. The analysis of the pilot test revealed significant effects in the variables under study and therefore, no changes were made in the sample size and research design. The findings of the pilot test reveal that male employees perceive a greater use of influence tactics by their leaders, as compared to their female counterparts. Also, organizational sectors were found to have a significant effect on perceived use of downward influence tactics and perceived leadership effectiveness, (Patel, & Biswas, 2011).

Following are the sub-steps involved in carrying out the data collection from all the four sector organizations:

I.   The Corporate Sector-

i.   An official letter addressed to the HR Manager, seeking permission to carry out research and explaining the purpose of the research study was prepared.

ii.   From the telephone directory, the contact number of the corporate organization was acquired.

iii.   A prior appointment with the HR manager was sought to hand over the official letter of permission and to explain the requirements of the study.

iv.   Once the HR manager seeks approval and consent from the CEO (or other superior), a second meeting is fixed with the researcher where the respondents

of the study and the time to carry out research are finalized. Five employees from the same department, reporting to the same leader/head are considered for the study.

v. On the appointed date and time, the researcher met the five employees of the organization and explained the purpose of the visit. Not revealing the nature of the study, the researcher handed over a copy of the questionnaire to each employee and gave general standardized instructions on how to complete each section of the questionnaire. Clearing any further doubts and queries, the researcher assured the confidentiality of the employee's identity and responses to the questionnaire and encouraged on completing the questionnaire as honestly as possible. Also, the researcher provided her contact number so that she can be reached promptly if and when any doubts arise while filling up the questionnaire. Providing duration of two days, the researcher left the employees to fill up the questionnaire at their leisure time.

vi. On the assigned date and time, the researcher came to collect the questionnaires from the employees. The set of five questionnaires were thoroughly checked for any mistakes or for any items left un-attempted. Securing a set of five complete questionnaires, the researcher bid goodbye to the respondents of the study and the HR manager, promising to share the results of the study in the future.

II. The Education Sector-

i. An official letter addressed to the Faculty Dean/Principal, seeking permission to carry out research and explaining the purpose of the research study was prepared.

ii. From the telephone directory/The University Dairy, the contact number of the educational organization was acquired.

iii. A prior appointment with the Faculty Dean/Principal was sought to hand over the official letter of permission and to explain the requirements of the study.

iv. Once the Faculty Dean/Principal gave approval and consent for the study, a second meeting was fixed with the researcher where the respondents of the study and the time to carry out research were finalized. Five faculty members from the educational institution, reporting to the Principal/ Faculty Head were considered for the study.

v.   On the appointed date and time, the researcher met the five faculty members of the organization and explained the purpose of the visit. Not revealing the nature of the study, the researcher handed over a copy of the questionnaire to each faculty member and gave general standardized instructions on how to complete each section of the questionnaire. Clearing any further doubts and queries, the researcher assured the confidentiality of the employee's identity and responses to the questionnaire and encouraged on completing the questionnaire as honestly as possible. Also, the researcher provided her contact number so that she can be reached promptly if and when any doubts arise while filling up the questionnaire. Providing duration of two days, the researcher left the faculty members to fill up the questionnaire at their leisure time.

vi.   On the assigned date and time, the researcher came to collect the questionnaires from the faculty members. The set of five questionnaires were thoroughly checked for any mistakes or for any items left un-attempted. Securing a set of five complete questionnaires, the researcher bid goodbye to the respondents of the study and the Faculty Dean/Principal, promising to share the results of the study in the future.

III.   The Development Sector-

i.   An official letter addressed to the Director, seeking permission to carry out research and explaining the purpose of the research study was prepared.

ii.   From the telephone directory/official website, the contact number of the various NGOs located in the Vadodara City was acquired.

iii. A prior appointment with the Director was sought to hand over the official letter of permission and to explain the requirements of the study.

iv.   Once the Director gave approval and consent for the study, a second meeting was fixed with the researcher where the respondents of the study and the time to carry out research were finalized. Five employees from the organization, reporting to the same leader/head were considered for the study.

v.   On the appointed date and time, the researcher met the five employees of the organization and explained the purpose of the visit. Not revealing the nature of the study, the researcher handed over a copy of the questionnaire to each employee and gave general standardized instructions on how to complete each

section of the questionnaire. Clearing any further doubts and queries, the researcher assured the confidentiality of the employee's identity and responses to the questionnaire and encouraged on completing the questionnaire as honestly as possible. Also, the researcher provided her contact number so that she can be reached promptly if and when any doubts arise while filling up the questionnaire. Providing duration of two days, the researcher left the employees to fill up the questionnaire at their leisure time.

vi. On the assigned date and time, the researcher came to collect the questionnaires from the employees. The set of five questionnaires were thoroughly checked for any mistakes or for any items left un-attempted. Securing a set of five complete questionnaires, the researcher bid goodbye to the respondents of the study and the Director, promising to share the results of the study in the future.

IV. The Law Enforcement Sector-

i. An official letter addressed to the Commissioner of Police of Vadodara City and the Commissioner of Police of Vadodara District, seeking permission to carry out research and explaining the purpose of the research study was prepared.

ii. The researcher went to the office of the Commissioner of Police of Vadodara City and of Vadodara District to seek an appointment with the Commissioner of Police to hand over the official letter of permission and to explain the requirements of the study.

iii. Once the Commissioner of Police granted permission to carry out the study in the police stations under his/her jurisdiction, the researcher went to the various police stations with the letter of permission to fix appointments with five police officers reporting to the same Inspector of Police (P.I) or the Sub-Inspector of Police (P.S.I).

iv. On the appointed date and time, the researcher met the five police officers of the police station to explain the purpose of the visit. Not revealing the nature of the study, the researcher handed over a copy of the questionnaire to each police officer and gave general standardized instructions on how to complete each section of the questionnaire. Clearing any further doubts and queries, the