CHAPTER – III

RESEARCH METHODOLOGY

This chapter outlines the methodological content of this research. It states about the research design, objectives of the study, hypothesis of the study and limitations of the study. It also explains the conceptual part of various dimensions as defined for the purpose of this study. Apart from this it states the sampling methodology, universe, tools for data collection and the analytical part of the collected data.

An attempt is also made to establish the relevance of this study with social work perspective.

THE CHANGING CONTEXT AND THE CURRENT RELEVANCE

Social work has a long history in India. The development of social work in India has to be studied in its historical perspective and with reference to the socio-economic background of the country. In earlier days, life in India used to be simple and moved generally along a set pattern. But the onslaught of industrial civilization and the increased pace of urbanization have set in motion an undercurrent of social changes.

India is getting more and more industrialized, facing new problems in the cities as well as in the rural areas. Today is an era of Liberalization, Globalization and Privatization. Indian economy has passed through a turnaround phenomena with these structural reforms in corporate world. This has given birth to new sets of various business challenges, few of which are as stated below:

• Minimize Cost, Improve Quality, Provide Service with Customer Delight for a competitive advantage.
• Cut the response time - Speed of change.
• Shift from the need from Survival to Passion for Excellence
• Knowledge economy. Customer getting more educated.
• Predict the future and develop resources to face the challenges.
• Product life cycles getting reduced or becoming more obsolete.
• Need for continuous improvements and innovations
• Forced to operate under lesser margins.
• Multi-skilling, delayering, contractual and flexible working force.
• Shift to control from Power-centric to contribution-centric.
• Cross-cultural issues on account of World becoming a global village.
• Impact of Environment on Quality of life.
• Strategic Alliance, Mergers and Acquisition

The torch has passed from 20\textsuperscript{th} century to 21\textsuperscript{st} century. The paradigms have shifted. The details stated below indicates the major shift in paradigms which have taken place in this transitory phase of organizational change.

Organizational Paradigms

<table>
<thead>
<tr>
<th>20\textsuperscript{th} Century</th>
<th>21\textsuperscript{st} Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability, predictability</td>
<td>Continuous Improvement</td>
</tr>
<tr>
<td>Size and scale</td>
<td>Speed and Responsiveness</td>
</tr>
<tr>
<td>Top-down &quot;Command and Control&quot;</td>
<td>Empowerment; leadership from all.</td>
</tr>
<tr>
<td>Organizational rigidity</td>
<td>Permanent Flexibility.</td>
</tr>
<tr>
<td>Control by rules and hierarchy</td>
<td>Control by vision and values.</td>
</tr>
<tr>
<td>Information closely guarded</td>
<td>Information shared</td>
</tr>
<tr>
<td>“Rational” quantitative analysis</td>
<td>Creative, intuition</td>
</tr>
<tr>
<td>Need for certainty</td>
<td>Tolerance of ambiguity</td>
</tr>
</tbody>
</table>
• Reactive, risk-averse
• Process driven
• Corporate independence
• Vertical integration
• Domestic market orientation
• Competitive advantage
• Competing for today's markets

• Proactive; entrepreneurial
• Results driven
• Inter dependence; strategic alliances
• "Virtual" integration
• International focus
• Collaborative advantage
• Creating tomorrow's markets.

**Significance of The Study with Social Work Perspective & Management Relevance**

Human relationship in general and interpersonal relationship of employees in specific is becoming more and more complex. The stress and strain on human mind are increasing which is more apparently visible because of the fundamental changes which have taken place in last three decades. That is where the scope of professional social work has gained its relevance in an industrial set-up.

' M Reisch and E Gabrill in their book 'Social work in 21st century' indicates this as an 'Employee Support Systems'. Social work has slowly gained a considerable significance in an industrial setup. The role of a professional social worker is now not only confined to monitoring of welfare activities, but has expanded as an educator, mediator, adviser and also as a change agent.

The profession of social work has its origin in fellow feeling and a desire to be of help to others, but its mornings are in social science. Professional social work has helped change the entire approach to social problems. We have moved in emphasis from punishment to rehabilitation, from amelioration to prevention. The principles of social work are now designed to inculcate an attitude of questioning rather than dogmatism. The good professional social worker masters his techniques without himself being limited by them.
The field of social work practice has enlarged its scope in order to suit modern conditions of an industrial environment. As is known, labour welfare has been an area of prime contribution for an industrial social worker. This can be seen from the provision of Factories Act, which specifically regulates the appointment of Welfare Officer. The act says that the incumbent for the position of Welfare Officer should necessarily have a Masters degree in social work. Thus employee management i.e. human resources management has been an area of significant relevance in the field of social work. It would be appropriate to mention that Baroda School of Social Work has envisaged this need much ahead of time and hence started a specialized Post Graduate course in Human Resources Management in the year 1999 to face the challenges of 21st century. Figure-3 below indicates various roles and functions of a professional social worker in an industrial setup.

**Figure-3**

<table>
<thead>
<tr>
<th>Roles</th>
<th>Functions</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Educator and Advisor to ignorant</td>
<td>1. Curative and preventive functions like managing absenteeism, stress, disablement, alcoholism and mental ailments</td>
<td>1. Lack of judicious image because of being a paid employee on management's role</td>
</tr>
<tr>
<td>2. Judicious fact finder and skillful investigator</td>
<td>2. Developmental functions like planning, promoting healthy industrial relation, leading and training of manpower.</td>
<td>2. Overlapping roles and non clarity about the functions on the part of management</td>
</tr>
<tr>
<td>3. Mediator and Catalyst for innovations and Change Facilitator for progressive trends</td>
<td>3. Statutory functions like compliance to legal requirements and liasoning with government authorities</td>
<td>3. Intangible results</td>
</tr>
</tbody>
</table>

105
In light of above challenges it is very relevant to undertake a study on human behavior by co-relating various behavioral parameters of employer - employee relationships.

Hence the variables selected for the purpose of this study are:

1. Organizational Effectiveness.
2. Productivity
3. Emotional Intelligence
4. Work Values

The above stated four variables are very significant and closely interconnected in today's corporate world. These variables also have a direct relevance with the job profile of an industrial social worker. Emotional Intelligence is an evolving concept in management world. Hence it is considered as a principal variable and the other three are taken as support variable in this study. Today's era, which is more known as an era of Personnel or HR Specialists era, emphasizes on correlating challenges with behavioral variables. The world at large has accepted the below mentioned four challenges as 'Challenges of Millennium'.

- Knowledge and expertise of people is the key resource for bringing the Organizational Effectiveness to its optimum level.
- Iron control over people through system and structure has a direct relevance with the Productivity of employees.
- Creativity from employees will flow only by creating new Work Values.
- Acceptance of Self-awareness, Self-regulation, Motivation and Empathy as basic emotional and social competencies by corporate world.

According to Paul Kurzman industrial social workers may be called on to consult with management in formulating a strategy to meet these challenges.
In light of the above challenges the role of an HR manager with a social work background would prove to be more of a mentor than a monitor.

Objectives of the Study

The main objectives of undertaking this study are as stated below:

1. To study the effectivity of an organization in its comprehensiveness in three leading industrial groups of Gujarat.
2. To study different dimensions of individual Productivity contributing to this comprehensive effectiveness of the organization.
3. To study different levels of Emotional Intelligence in employees belonging to the middle management cadre of these organizations.
4. To study existing level of value for work (work values) in these organizations.
5. To probe in areas related to Health and Personality traits of employees and study their relationship with other dimensions of Emotional Intelligence.
6. To study co-relation between Emotional Intelligence of employees, effectiveness of the organization, individual productivity and values for work in these organizations.

Hypothesis of the Study

1. Organizational Effectiveness will be higher in Reliance as compared to Essar and Adani.
2. Organizational Effectiveness might have a direct positive co-relationship with the Emotional Intelligence of employees. This means that the employee's Emotional Intelligence will be positively co-related to Organizational Effectiveness.
3. Employee's individual Productivity might have a direct positive co-relationship with the Organizational Effectiveness of employees. This means that the
employee’s individual Productivity will be positively co-related to Organizational Effectiveness.

4. Higher the average salary – Higher would be the Individual Productivity of an employee.

5. General condition of health and personality traits of employees might have positive co-relationship with the other dimensions of Emotional Intelligence. This means that organization which would be 1st on dimension of ‘General health’ and ‘Personality traits’ would also be 1st on the overall ranking of Emotional Intelligence.

6. Higher the Education – Higher would be the Emotional Intelligence of an employee.

7. Employee’s Work values might have a direct positive co-relationship with the Productivity of employees. This means that the employee’s Work values will be positively co-related to Productivity.

8. Organizational Effectiveness and Productivity on one end and Emotional Intelligence and Work values on the other end put together will have direct positive co-relationship.

Research Design

This study is basically diagnostic and co-relational in nature but shall also have exploratory and descriptive aspects for various dimensions incorporated in four main variables.

In the course of the study an attempt is made to relate Emotional Intelligence as a main variable with three other support variables i.e. Organizational Effectiveness, Productivity and Work Values.
The study intends to measure the level of Emotional Intelligence prevailing in employees with the help of a structured questionnaire and establish its relationship with the three other support variables stated above.

This justifies the diagnostic and Co-relational design of the study.

Limitations of the study

1. This study is limited to the study carried out in three industrial groups of Gujarat and therefore it’s findings can not be generalized to be true for other industries.

2. The four variables selected for this study are basically not tangible and having abstract characteristic. However referring various literature few important dimensions have been incorporated and measured in each of these variables. Considering the vastness of the subject there is a an inherent limitation of the study, restricting its generalization.

3. The study is also limited to the middle management employees of the organization. Although they constitute a major work force and are large in number but still it is limited to the opinions expressed by a certain segment only.

Explanation of Various Dimensions of Four Variables

a. Organizational Effectiveness

1. Consensus

   It is important for all employees to be in line with the mission and vision of the organization. This uniformity in perception will lead to right type of an attitude of employees. Such oneness is Consensus. It is assessed by statement number-1 in questionnaire.
2. Legitimization  
It measures acceptance of superiors by their subordinates. Employees at the level of an authority would not be successful by demanding respect but they need to command respect. This shall give them unlimited right to exercise control on their subordinates. It is assessed by statement number-2 in questionnaire.

3. Need for Independence  
A capability of a person to think independently about his work related problems and take his own judgment by proper evaluation of the consequences and without supervisor's involvement. It is assessed by statement number-3 in questionnaire.

4. Self control  
It refers to member's felt responsibility towards the job without managerial control. It measures the level of belongingness an employee has for his organization. It is assessed by statement number-4 in questionnaire.

5. Job involvement  
Degree to which a person is identified psychologically with his work or the importance of work in his total self-image. It measures how much an employee considers work as a worship and enjoys the job that he performs. It is assessed by statement number-5 in questionnaire.

6. Innovation  
Measures how often the respondent comes up with new, creative ideas to deal with the job, without anyone's help. It is assessed by statement number-6 in questionnaire.

7. Organizational commitment  
Measures how much the respondents care for the prosperity of the organization and how much he is willing to work and contribute for the goal of
an organization. His preparedness to compromise his personal goals in favor of organizational goals is termed as organizational commitment. It is assessed by statement number-7 in questionnaire.

8. Organizational attachment
   It refers to the extent of respondent’s attachment towards the organization. It measures to what extent an employee has been relating to his company as ‘my company’. It is assessed by statement number-8 in questionnaire.

9. Job satisfaction
   It refers to the generally prevalent positive attitude towards various aspects of job. It measures the level of satisfaction an employee has with reference to the authorities and responsibilities shouldered by him and contribution made by him to the total. It is assessed by statement number-9 in questionnaire.

b. Productivity

1. Learning attitude
   It measures the learning aptitude an employees has towards their job assignment. His attitude to learn new things and keep himself update with new information and developments. It is assessed by statement number-10 in questionnaire.

2. Motivational morale
   It measures the extent to which employees’ morale is high and whether they are self-motivated or they seek monetary and non-monetary incentives to work efficiently and effectively to meet their targets. It is assessed by statement number-11 in questionnaire.

3. Discipline
   It measures the extent to which the employees are disciplined and don’t support indiscipline of others. To what extent they are regular in attendance
and show consistency in their behavior. It is assessed by statement number-12 in questionnaire.

4. Working conditions
It measures the extent to which working conditions are ideal in the organization and the employees have the ideal equipment to do their work. It is assessed by statement number-13 in questionnaire.

5. Work methodology
It measures the extent to which the working systems and procedures are arranged and spelled out in simple manner. It talks about the understanding of employees with respect to their authority, responsibilities and terms of employment. It is assessed by statement number-14 in questionnaire.

c. Emotional Intelligence

1. Work
This section identifies the level of job satisfaction, scope of advancement, the impression about the work in the employee’s mind. This reflects the work related emotions which are an integral part of employee’s emotional life. It is assessed by statement numbers-25 to 34 in questionnaire.

2. Emotional Self-awareness
It is the measure of the knowledge of one’s own self, the reason for the same, causes, and effects of one’s thoughts and actions. This helps in becoming aware about oneself and having a presence of mind which goes a long way in behavior shaping of individuals. It is assessed by statement numbers-35 to 40 in questionnaire.
3. Emotional Expression

How expressive one is of one’s own negative as well as positive emotions. This also measures the expression made for others. The more emotionally expressive one is, the less part of emotional stress one experiences. It is assessed by statement numbers-41 to 46 in questionnaire.

4. Emotional awareness of others

This reflects one’s awareness and impression about other people and consequent behavior from them. Emotional awareness of others would develop by being a good listener and by having an ability of reading between the lines. It also means to be considerate and develop understanding during the course of interaction with others. It is assessed by statement numbers-47 to 53 in questionnaire.

5. EQ competencies internationality

This section focuses on the person’s assertiveness and responsibility. It is about how a person deals with self and others. It is assessed by statement numbers-54 to 64 in questionnaire.

6. Creativity

This deals with the psychological and intellectual innovativeness, intuition and foresight of the employees at work place. It is assessed by statement numbers-65 to 70 in questionnaire.

7. Resilience

This measures the level of patience, persistency, determination of a person and the ability to cope with problems and return to normalcy at the earliest. It is assessed by statement numbers-71 to 76 in questionnaire.
8. Interpersonal connection

It implies the emotional boundaries a person has, ability to grieve and give in at times, security about relationship and ability to be expressive about one's feelings towards loved ones. It is assessed by statement numbers-77 to 82 in questionnaire.

9. Constructive discontent

These questions reflect the amount of positive attitude one has towards criticism and feedback from others and weather one is able to constructively deal with discontent/disagreement. It is assessed by statement numbers-83 to 89 in questionnaire.

10. EQ values and beliefs comparison

This reflects the consideration one has for others, the resentments, and ethics one follows and believes in. It is assessed by statement numbers-90 to 96 in questionnaire.

11. Outlook

It is the reflection of one's outlook which may be positive or negative, optimistic or pessimistic. This has an effect on the emotional well being of an individual, which in turn frames one's attitudes and actions. It is assessed by statement numbers-97 to 100 in questionnaire.

12. Trust radius

This reflects a person's credibility, belief about other people's behavior and treatment towards him which affects the work performance and behavior of the concerned individual. It is assessed by statement numbers-101 to 107 in questionnaire.
13. Personal Power

It reflects the belief in one's own potential and ability to control things and self. It is a strong determinant of one's self-confidence and actions. It is assessed by statement numbers-108 to 115 in questionnaire.

14. Integrity

It measures values and ethics such as honesty, commitment and justice based on one's perception and priorities of life. It is assessed by statement numbers-116 to 122 in questionnaire.

15. Quality of life

This is the overall effect of one's emotional and physical health on the basis of life one lives, by utilizing the available resources and opportunity. It is assessed by statement numbers-123 to 128 in questionnaire.

16. Relationship quotients

It is the level of intimacy one can share with near ones, the ability to give, love deeply and care. It is assessed by statement numbers-129 to 134 in questionnaire.

17. Optional performance

This is the ultimate effect on work of one's emotional well-being. The way one is committed to work, executes time management and performs is assessed here. It is assessed by statement numbers-135 to 139 in questionnaire.
18. General health

This helps to identify the physical manifestation of the emotional disturbances. It talks about the general health of a person with respect to common problems like back pain, obesity, stress and addictions. It is assessed by statement numbers-140 to 161 in questionnaire.

19. Personality Traits

This relates to various basic traits of personality which an individual has and it’s relationship with emotional intelligence. It is assessed by statement numbers-162 to 205 in questionnaire.

d. Work Values

1. Interest in work

This refers to the interest with which an employee does his job. It also indicates an opportunity to display his talent and skills in the job he does. It is assessed by statement number-15 in questionnaire.

2. Supervisory treatment

This refers to the dignity and self respect given by superiors to their employees. It also indicates the care and support extended by management in managing difficult times of an employee. It is assessed by statement number-16 and 17 in questionnaire.

3. Participation

It indicates employee’s involvement by providing an opportunity to participate and offer suggestions and whether employee would be willing to change over at same terms. It is assessed by statement number-18 and 19 in questionnaire.
4. Rewards and punishment

It indicates the policy of the management to appreciate good work being done by an employee and a courage to punish by taking disciplinary actions. It is assessed by statement number-20 in questionnaire.

5. Praise and blame

It indicates the security of the job and tolerance of the management to small acts of misconduct by an employee. It is assessed by statement number-21 and 22 in questionnaire.

6. Favoritism

This indicates the impressions the employee has with respect to the transparency in recruiting and promoting a right employee. It is assessed by statement number-23 and 24 in questionnaire.

**Universe**

The universe consist of middle management employees of three different, large, fast growing, geographically staggered and diversified business houses of Gujarat.

The study is focused on Reliance Group of Industries, Essar Group of Industries and Adani Group of Industries.

These industries have been selected keeping in view the following considerations:

1. These industries are big enough to measure the impact of various dimensions and draw conclusions thereof.
2. They are fast growing with high profitability and hence the individual productivity and work values are apparently relevant variables in these organizations.

3. These are business groups with diversified business interest and having multi-locational manufacturing setups. Hence they have cross cultural employees making it a right type of heterogeneous sample for the purpose of this study.

4. They employ huge work force and hence the size of the sample available from each organization is adequate to draw meaningful inferences.

5. The management of these organizations consist of professionally qualified young entrepreneurs and hence the culture of the organization is holistic culture and not only profit generating culture.

**Sampling Method**

The middle management executives working with Reliance Group of Industries, Essar Group of Industries and Adani Group of Industries have been selected as respondents for the study.

Probability sampling under restricted sampling techniques results in complex random sampling designs. These designs are also called 'mixed sampling designs'. One of the popular complex random sampling design is known as 'Systematic Sampling'. This method has been used in this study to select particular units from the universe for constituting the sample.

In instances were the most practical way of sampling is to select every $n^{th}$ item on the list, this sampling method proves to be the best. Sample so selected will very strongly represent the universe, since every alternate employee has been considered as a sample for the purpose of this study i.e. 50% of the universe constitutes to be sample.
The middle management executives are as specified below:

1. Employees in the age group of 25 to 50 years.
2. Employees whose educational background is Graduation and above in any of the areas i.e. technical or non-technical area.
3. Employees who have been working for more than three years with the organization under study.
4. Employees whose overall experience is minimum three years and above.
5. Employees whose gross monthly income is in range of Rs.20,000/- to Rs.45,000/- excluding yearly perquisites.

Considering the above criteria the universe consisted of 806 employees representing three organizations. Hence as stated above 'Systematic Sampling Method' was used and every alternate employee is selected for the purpose of this study.

Accordingly a total sample of 403 (four hundred and three) 207 from Reliance Industries, 114 from Essar Industries and 82 from Adani group are selected as sample for the purpose of this study.

Tools for Data Collection

A quantitative questionnaire with a four-point scale has been used as a tool for measuring main variable i.e. Emotional Intelligence. While a four point scale has been used for measuring support variables i.e. Organizational Effectiveness, Productivity and Work values. The questionnaire is broadly divided in five parts.

1. The first part includes background variables like name of the respondent/organization, age, education, experience, years of service with the organization, category and income.
2. The second part is the tool on organizational effectiveness measuring nine (9) dimensions. They are:

- Consensus
- Legitimization
- Need for Independence
- Self Control
- Job Involvement
- Innovation
- Organizational commitment
- Organizational attachment
- Job satisfaction

This tool is constructed by Dr. C.N. Daftuar and has been used by many researchers in the past.

3. The third part is the tool on productivity measuring five (5) different dimensions.

- Learning attitude
- Discipline
- Work methodology
- Motivational morale
- Working conditions

This tool was constructed by ‘National Productivity Council’ and has been taken from the validated and published literature available from them.

4. The fourth part is the tool on work values measuring six (6) dimensions.

- Interest in work
- Participation
- Praise and blame
- Supervisory treatment
- Rewards and punishment
- Favoritism

This tool on work values is constructed by DOSE J.J. of British Psychological Society and Ravlin, Meglino of American Psychological Associations.
5. The fifth part is a tool on emotional intelligence measuring nineteen (19) dimensions.

- Work
- Emotional expression
- EQ competencies internationality
- Resilience
- Constructive discontent
- Outlook
- Personal power
- General health
- Relationship quotients
- Personality Traits
- Emotional self-awareness
- Emotional awareness of others
- Creativity
- Interpersonal connection
- EQ values and beliefs comparison
- Trust radius
- Integrity
- Quality of life
- Optional performance

This tool is constructed by Mr. Tim Sparrow who is an international team member and certified EQ – Map practitioner, representing an organization called Heartskill™ in U.S. He has modified and validated this tool for global application by various experimentations and researches done by Heartskill™ all over the world.

Treatment of Data

Various statistical tests have been used for treating the collected data. These statistical tools are:

1. Simple frequency distribution and bi-variate statistical analysis have been done as per the requirement of the analysis.

2. Chi-Square test and Analysis of Variance (ANOVA) have been used to examine the relationship between various variables. The chi square test is run
between the three companies for testing significant differences of high and low values.

3. For running a paired t test, comparison is made between any two companies with reference to a particular parameter e.g EI. This test is eligible for use since the same statements were given to all the respondents and data was systematically available from all industries.

4. The coefficient of correlation is used to compare the respondent wise analysis existing between various types of ratings obtained. This shows how one parameter is related to another parameter. Since the three companies are independent of each other, separate analysis has been done for them.

5. The average, sigma and various types of graphs are used for giving more specific back up of the existing data. Simple tables displaying frequency and % shall be prepared in order to specifically know response to each question separately.

Chapterization of the Study

This study is proposed to be structured in six different chapters.

Chapter-1 Introduction

The first chapter includes the introduction of the topic under study with discussion on various concepts like historical perspective of industrialization in world at large with a specific reference to India. It also elaborates in detail the conceptual framework of all the four variables i.e. emotional intelligence, organizational effectiveness, productivity and work values.

Chapter-2 Review of Literature

In second chapter a systematic presentation of literature survey on all the four variables is presented in details. Such and similar studies done by different
scholars at different point of time are mentioned in a chronological order. An attempt is also made to relate this study with social work dimension and the explanation regarding the same is stated in 'Researcher's Submission' at the end of each review.

Chapter-3 Research Methodology
The third chapter outlines the methodological content of the study and mentions about the research design, universe, sampling procedure, sample, tools of data collection and limitations of the study.

Chapter-4 Research Setting
The fourth chapter contains the profile of various organizations from which the data for the present study has been collected.

Chapter-5 Data Analysis and Interpretations
In the fifth chapter, analysis and interpretation of the data is presented in the form of various tables and graphs. Interpretation of these figures is also stated in the form of a small paragraph below each table.

Chapter-6 Finding, Conclusions and Suggestions
Findings and Conclusions shall be presented in the sixth chapter where in important findings shall be highlighted and their implications shall be discussed. Based on the findings and conclusions, an effort shall be made to present some suggestions for the academics and practicing professionals.

* * * * *