CHAPTER- III

METHODOLOGY
CHAPTER - III
METHODOLOGY

1. Introduction
2. Problem of the study
3. Objective of the Study
4. Hypothesis
5. Methodology
6. Statistical Analysis
CHAPTER- III
METHODOLOGY

1. Introduction:
After independence, education and employment among women spread vary fast. today, women are taking active part in social, political, educational and professional services. Woman’s economic horizon once confined to domestic servanthood or labour on the farm has expanded considerably fields. They are now employed as a doctors, lawyers, nurses, journalists, engineers, teachers, photographers, pilot, army officers, officers in government department and in commercial houses and also doing their independent business.

The married and unmarried woman faces a lot of adjustment problem in their work place and even their family also. Marriage is a socio-cultural system providing satisfaction for love, affection, intimacy, relatedness, affiliation, financial and social security, parenthood, physical safety and social attitudes, cultural values level of social-economic and educational status, work status, family type, occupation etc. Influencing mental health of working women. Family and work places are extremely controlling, they emphasis regularity in systems and orders. Thus demands of family environment and work environment affects working women’s physical or and mental health or any its systems.

2. Problem of the study:
“Mental health of married and unmarried working women of different organizations in relation to family environment and work environment”

3. Objectives of the study:
The main objectives of the study were as under.
1. To assess mental health of married and unmarried working women of private and public sectors in relation to urban and rural areas.
2. To find out to nature of family environment of married and unmarried working women of private and public sectors.
3. To find out nature of work environment of private and public sectors working women
in relation to urban and rural areas.

4. To find out the correlation between mental health and various factors of family environment among married and unmarried working women of private and public sectors.

4. Hypothesis:

In any research work hypothesis is very important. Hypothesis provides proper tract for the study. To achieve all the sundry objectives of the study the researcher formulated some hypothesis. Following null hypothesis were formulated with the purpose of determining the main effect as well as interaction effect of the independent variables.

1. There is no significant difference between married and unmarried working women on scores of mental health.

2. There is no significant difference between private sector and public sector working women on scores of mental health.

3. There is no significant difference between rural and urban working women on scores of mental health.

4. There is no significant interactive effect of marital status x organization of subjects on their scores of mental health.

5. There is no significant interactive effect of marital status x habitate of subjects on their scores of mental health.

6. There is no significant interactive effect of organizations x habitate of subjects on their scores of mental health.

7. There is no significant interactive effect of marital status x organizations x habitate of subjects on their scores of mental health.

8. There is no significant difference between married and unmarried working women on scores of family environment subscale i.e., cohesion; expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

9. There is no significant difference between private sector and public sector working women on scores of women scores of family environment subscale i.e.,
cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

10. There is no significant difference between rural and urban working women scores of family environment subscale i.e., cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

11. There is no significant interactive effect of marital status x organization of subjects on their scores of family environment subscale i.e., cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

12. There is no significant interactive effect of marital status x habitate of subjects on their scores of family environment subscale i.e., cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

13. There is no significant interactive effect of organizations x habitate of subjects on their scores of family environment subscale i.e., cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

14. There is no significant interactive effect of marital status x organizations x habitate of subjects on their scores of family environment subscale i.e., cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral religious emphasis, organization and control.

15. There is no significant difference between private sector and public sector working women scores of work environment subscale i.e., involvement, peer cohesion, staff support, autonomy, task orientation, work pressure, clarity, control, innovation and physical comfort.

16. There is no significant difference between rural and urban working women on scores of work environment subscale i.e., involvement, peer cohesion, staff support,
autonomy, task orientation, work pressure, clarity, control, innovation and physical comfort.

17. There is no significant interactive effect of marital status x organization of subjects on their scores of work environment subscale i.e., involvement, peer cohesion, staff support, autonomy, task orientation, work pressure, clarity, control, innovation and physical comfort.

18. There is no significant interactive effect of organizations x habitate of subjects on their scores of work environment subscale i.e., involvement, peer cohesion, staff support, autonomy, task orientation, work pressure, clarity, control, innovation and physical comfort.

19. There is significant correlation between mental health and various factors of family environment among married and unmarried working women of private sectors.

20. There is significant correlation between mental health and various factors of family environment among various groups of working women.

5. Methodology:

5.1 Experimental Design:

The most important part of the research work is experimental design. Looking to the objectives of the present study many research design would may come forward to claim for their right, but factorial design would satisfy all the objectives of the present study. There are also drawbacks of the factorial design in considering the cost and large number of sample size required for the research work.

To satisfy all the objectives of the present study. The researcher choose to go for 2 x 2 x 2 factorial design in order to arrive at valid conclusions.

5.2. Variables:

In the present study 2 x 2 x 2 factorial design is used in which two level of marital status of working women (married, unmarried) two level of organization (private sector, public sector) and two level of habitate (rural-urban) are taken as independent variable. Score of mental health, family environment scale (10 dimensions of family environment) and work environment scale (10 dimensions of work
environment) are taken as dependent variable.

In present investigation the nature of variables is given in following table:

**Table : 3.1**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the Variables</th>
<th>Nature of Variables</th>
<th>Number of Level</th>
<th>Name of the Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Marrital Status</td>
<td>Independents</td>
<td>2</td>
<td>Married Working women</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Variables</td>
<td></td>
<td>Unmarried Working women</td>
</tr>
<tr>
<td>2.</td>
<td>Organization</td>
<td>Independents</td>
<td>2</td>
<td>Private and Public Sector</td>
</tr>
<tr>
<td>3.</td>
<td>Habitat</td>
<td>Independents</td>
<td>2</td>
<td>Rural and Urban</td>
</tr>
<tr>
<td>4.</td>
<td>Mental health</td>
<td>Dependents</td>
<td>1</td>
<td>Mental Health Score</td>
</tr>
<tr>
<td>5.</td>
<td>Family Environment</td>
<td>Dependents</td>
<td>10</td>
<td>Scores of Family Environment Subscale</td>
</tr>
<tr>
<td>6.</td>
<td>Work Environment</td>
<td>Dependents</td>
<td>10</td>
<td>Scores of Work Environment Subscale</td>
</tr>
</tbody>
</table>

5.3 Sample :

For the present research work sample confind from Gujarat. The sample were drawn from the district of Ahmedabad, Patan, Banaskantha, Surendranagar, Mehsana, Sabarkantha, Valsad, Panchmahal and Surat. The urban sample draw from the district head quarters. It was necessary to take a large sample to cover all the three independent variable namely; two level of marital status (Married, unmarried) two level of organization (private sector, public sector) and two level of habitat (rural-urban) are taken as independent variable. Score of mental health, family
environment scale (10 dimensions of family environment) and work environment scale (10 dimensions of work environment) are taken as dependent variable.

For the purpose of the present investigation a sample consisted of 240 individual subject. The subject belonged to the age range of 25 to 45 years and job tenure of the subject was 5 to 15 year. The educational qualification of subject was at least graduate. The total sample is categorised as under.

<table>
<thead>
<tr>
<th>Table: 3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of the Sample</td>
</tr>
<tr>
<td>A1</td>
</tr>
<tr>
<td>B1</td>
</tr>
<tr>
<td>C1</td>
</tr>
<tr>
<td>C2</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

A1 = Married working women  
A2 = Unmarried working women  
B1 = Private sectors  
B2 = Public sectors  
C1 = Rural  
C2 = Urban

5.4 Tools:

The following tools were used in the present research work.

1. Mental Health Check-List by Dr. Pramod Kumar.
2. The Family Environmental Scale by Mohanchandra Joshi & Dr. Om Prakash Vyas.
3. The Work Environmental Scale by Rudolf H. Moos and Paul M. Insel.

5.4.1 Mental health check-list:

Mental health Check List consists of 11 items-6 mental and 5 somatic, presented in a 4 point rating format e.g. ‘rarily’ ‘at times’, ‘often’ and ‘always’. A numerical value of 1,2,3, and 4 is assigned to the 4 response categories, i.e., for ‘rarily’, ‘at times’, ‘often’ and always, respectively. The total score varies from 11 to 44, showing the highest to the lowest (poorest) mental health status of the person.

The split-half reliability, correlating the odd-even items (applying the
Spearman-Brown formula for doubling the test length has been found to be .70 (n=30) with an index of reliability also been studied. It has been found to be .65 (n=30) with an index of reliability of .81. The retest was given with a time interval of two weeks.

The value of .70 and .65, reliability have been found to be significant at .01 level of confidence, showing that the test is reliable both in terms of its internal consistency and stability of scores.

The face validity of the mental health check-list appears to be fairly high as items were prepared by asking teachers of psychology to list all such symptoms which according to them showed poor mental health. The content validity was adequately assured as only those symptoms which showed 100 percent agreement amongst the judges regarding their relevance to the study of mental health were selected.

5.4.2 The Family Environmental Scale:

The family environmental scale assesses the social climates of all types of families. It focuses on the measurement and description of the interpersonal relationships among family members, on the directions of personal growth which are emphasized in the family, and on the basic organizational structure of the family. Family environment scale consist ten subscale consists 79 items.

Descriptions of the family environment sub-scale:

1. Cohesion:
   The extent to which family members are concerned and committed to the family and the degree to which family members are helpful and supportive of each other.

2. Expressiveness:
   The extent to which family members are allowed and encouraged to act openly and to express their feelings directly.

3. Conflict:
   The extent to which the open expression of anger and aggression and generally
conflictual interactions are characteristic of the family.

**Personal Growth Dimensions:**

4. Independence:
   The extent to which family members are encouraged to be assertive, self-sufficient, to make their own decisions and to think things out for themselves.

5. Achievement Orientation:
   The extent to which different types of activities (i.e., school and work) are caste in to an achievement orientated or competitive framework.

6. Intellectual - Cultural Orientation:
   The extent to which the family is concerned about political, social, intellectual and cultural activities.

7. Active Recreational Orientation:
   The extent to which the family participates actively in various kinds of recreational and sporting activities.

8. Moral Religious Emphasis:
   The extent to which the family actively discusses and emphasizes ethical and religious issues and values.

**System Maintenance Dimensions:**

9. Organization:
   Measures how important order and organization is in the family in terms of structuring the family activities, financial planning and explicitness and clarity in regard to family rules and responsibilities.

10. Control:
    Assess the extent to which the family is organized in a hierarchical manner, the rigidity of family rules and procedures and the extent to which family members order each other around.
Table No. 3.3 shows the subscale internal consistencies the average item to subscale correlations and eight week individual test-retest reliabilities for the Form R Subscales.

Table: 3.3
Internal Consistencies, Average Item-Subscales Correlations and Test-Retest Reliabilities for FES Form R Subscales.

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Internal Consistency (N=814)</th>
<th>Average Item Subscale Corr. (N=814)</th>
<th>Test-Retest Reliability (N=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>.78</td>
<td>.58</td>
<td>.86</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>.81</td>
<td>.48</td>
<td>.73</td>
</tr>
<tr>
<td>Conflict</td>
<td>.75</td>
<td>.56</td>
<td>.85</td>
</tr>
<tr>
<td>Independence</td>
<td>.64</td>
<td>.45</td>
<td>.68</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>.65</td>
<td>.49</td>
<td>.74</td>
</tr>
<tr>
<td>Intellectual-Cultural Orient</td>
<td>.78</td>
<td>.54</td>
<td>.82</td>
</tr>
<tr>
<td>Active-Recreational Orient</td>
<td>.68</td>
<td>.48</td>
<td>.77</td>
</tr>
<tr>
<td>Moral Religious Emphasis</td>
<td>.79</td>
<td>.55</td>
<td>.80</td>
</tr>
<tr>
<td>Organization</td>
<td>.78</td>
<td>.52</td>
<td>.76</td>
</tr>
<tr>
<td>Control</td>
<td>.70</td>
<td>.51</td>
<td>.77</td>
</tr>
</tbody>
</table>

4.3.3. The Work Environment Scale:

The work environment sub-scale assesses the social climate of all types of work units. It focuses on the measurement and description of the interpersonal relationships among employees and between managers and employees; on the directions of personal growth and development which are emphasized in the work unit and on the basic organized understanding of the social environments of work groups and to obtain an initial pool of questionnaire items. Work environment scale consists ten sub-scale, consisting 90 items.

Descriptions of work environment sub-scale relationship dimensions.

1. Involvement:

Measures the extent to which workers are concerned and committed to their
jobs, includes items designed to reflect enthusiasm and constructive activity.

2. Peer Cohesion:
   Measures the extent to which workers are friendly and supportive of each other.

3. Staff Support:
   Measures the extent to which management is supportive of workers and encourages workers to be supportive of each other.

Personal Growth Dimensions:
4. Autonomy:
   Assesses the extent to which workers are encouraged to be self-sufficient and to make their own decisions. Includes item related to personal development and growth.

5. Task-Oriented:
   Assesses the extent to which the climate emphasizes good planning, efficiency and encourages workers to “get the job done”.

6. Work Pressure:
   Measures the extent to which the press of work dominates the job milieu

7. Clarity:
   Measures the extent to which workers know what to expect in their daily routines and how explicitly rules and policies are communicated.

8. Control:
   Measures the extent to which management uses rules and pressures to keep workers control.

9. Innovation:
   Measures the extent to which variety change, and new approaches are emphasized in the work environment.
10. Physical Comfort:

Assesses the extent to which the physical surroundings contribute to a pleasant work environment.

The psychometric characteristic of the work environment scales were evaluated using internal consistencies (Kuder-Richardson Formula 20) average item-to sub-scale correlations and sub-scale intercorrelations. The average item-to sub-scale correlations are relatively high.

Internal Consistencies and Average Item-Sub-scale Correlations for form R subscales (n=246).

Table No. 3.4 shows the sub-scale internal consistencies the average item to sub-scale correlations and eight week individual test retest reliabilities for the form R sub scales.

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Internal Consistency</th>
<th>Average Item Subscale Corr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>.85</td>
<td>.60</td>
</tr>
<tr>
<td>Peer Cohesion</td>
<td>.70</td>
<td>.48</td>
</tr>
<tr>
<td>Staff-Support</td>
<td>.78</td>
<td>.56</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.76</td>
<td>.51</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>.78</td>
<td>.51</td>
</tr>
<tr>
<td>Work Pressure</td>
<td>.84</td>
<td>.57</td>
</tr>
<tr>
<td>Clarity</td>
<td>.82</td>
<td>.55</td>
</tr>
<tr>
<td>Control</td>
<td>.77</td>
<td>.50</td>
</tr>
<tr>
<td>Innovation</td>
<td>.91</td>
<td>.63</td>
</tr>
<tr>
<td>Physical Comfort</td>
<td>.83</td>
<td>.53</td>
</tr>
</tbody>
</table>

9. Procedure:

Mental health Check-list by Dr. Pramod Kumar, Family Environment Scale by Prof. Mohan C. Joshi and Dr. Om Prakash Vyas, Work Environment Scale by
Rudolf H. Moos and Paul M. Insel were administered simultaneously to the selected sample. Due to the fatigue precautions were taken during the administration and so it was administered after short break. All the precautions were taken during the test administration as per manual also.

Later on, the responses of each of the tests were scored as per scoring key on the basis of test scores of subjects, all subjects were assigned to corresponding level of each of three independent variable and their scores on mental health, various factors of family environment and work environment (dependent variable) were statistically analysed to study their role in mental health family environment and work environment.

10. Statistical analysis:

To analysed the obtained data 2 x 2 x 2 factorial design were scored as per procedure and analysed by statistical technique of analysis of variance in order to study main effect as well as interaction effect of the three variables viz, married unmarried, organizations and habitat, as in factorial design. After such analysis of variance showing the overall differences among the variable levels, same data obtained were further subjected to another statistical techniques. Least Significant Differences, of the difference between any two specific groups in pair formed by different level of variable found to be significant by the F test.

To find out the correlation between Mental health and various factors of family environment among various group of working women, technique of product moment correlation was used.

* * * * *