After putting forth the literature related to present study in the previous chapter, this chapter provides details on the design of the study that includes research design, sample design, research tools, scope of the study and data analysis. It also includes procedures adopted for the execution of the present investigation with the aim to find “Effect of Maternal Work Conditions on Personality Development of Children”. The data was reviewed to understand various aspects of research problem. Questionnaires were prepared for working mothers and pre-school children. The questionnaires were finalized and administered on the working mothers to record their perception about working conditions at their workplace and cognitive, non-cognitive and personality development of their pre-school children. The data was collected and tabulated for statistical and quantitative analysis in order to derive results and conclusions. The details of the research methodology are as follows:

3.1 Research Design: The information source for the study was primary as well as secondary sources. The secondary data was obtained from various published sources of journals, magazines, prospects, books and different websites. The secondary data was used only after thorough scrutiny. The primary data for the study was collected from pre-school children and working mothers from four sectors of employment viz: health, education, banks and judiciary in Kashmir Division. Various meetings and discussions were held with the respondents in order to know their perception about working conditions of women and personality of pre-school children.

3.2 Sample Design: To achieve the objectives of the present investigations, a set of sample was drawn from Kashmir valley. The sample was drawn from health, education, judiciary and banking sector for the present study as these are the sectors where almost 70% of women are working in Kashmir. Purposive sampling technique was used to select working women with children between 3-6 years of age. A sample
of 400 working women has been derived on the basis of the following formula:

\[
n = \frac{N \left( t_\alpha^2 P(1 - P) / d^2 \right)}{N + \left[ t_\alpha^2 P(1 - P) / d^2 - 1 \right]}
\]

Whereas;

- \( n \) = Sample Size
- \( P \) = Population proportion (0.50)
- \( N \) = Population Size
- \( d \) = Desired margin of error (5%)

\( t_\alpha \) = Confidence level (95%)

Further, 400 children aged between 3-6 years, belonging to the same selected working mothers were selected for the study. Sample was equally distributed among all the four districts (200 from each district) in order to arrive at dependable conclusion.

Below table illustrates the distribution of sample size in the present study:

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>District</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Srinagar</td>
<td>Anantnag</td>
</tr>
<tr>
<td>Working Mothers</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Pre-School Children of Working Mothers</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

### 3.3 Research Tools

The questionnaire for working women was administered on working mothers with children between 3-6 years of age. Other two questionnaires were for pre-school children, among which one was M5-PS personality questionnaire and the other was cognitive and non-cognitive development questionnaire. In designing the questionnaires, simple language was used to obtain appropriate information from the respondents.

The tools used in the survey are:

- Questionnaire for Working Conditions of Women
- M5-PS Personality Test for Children
- Questionnaire for Cognitive and Non-Cognitive Development of Children

The questionnaires included various sections that are:
• **Questionnaire for Working Conditions of Women**

A structured questionnaire was developed to assess the working conditions of women at workplace. The questionnaire has five sections and each statement in the section consists of dichotomous questions among which the respondent has to choose the relevant one. The details of each section are as follows:

**Section-1: Background Information/Demographic Data**

This section deals with background information of working mothers. It provides us with the information about the age, religion, educational status, marital status, family type, number of children etc of a working mother.

**Section-2: Occupational Conditions**

This section deals with various sub-sections i.e. nature of work, facilities at work, benefits provided and occupational health safety.

**Section-3: Family Support**

This section deals with the support extended by the family members of the working women towards her. Questions related to emotional support, social support etc are also part of this section.

**Section-4: Problems in upbringing children**

In this section, various problems of a working mother have been put forth. These problems deal with questions related to upbringing children effectively because of mothers work.

**Section-5: Coping Strategies**

This section deals with some coping strategies used by working mothers in dealing with problems at workplace. These coping strategies include physical, mental and occupational stress management techniques.

In order to know about the conditions of work, the respondents were asked to select the relevant response out of two options viz “Yes” and “No”. Statistically, the corresponding score for the option “Yes” was 2 and for “No”, it was 1. The negative statements were reverse-scored. Higher the total score, more feasible were the working conditions.

• **M5-PS Personality Test for Children:**

This Personality questionnaire focuses on the personality and behaviour of pre-school children primarily 3-6 years of age. The M5-PS questionnaire has been devised by
Grist and McCord (2009). The M5-PS comprises of five scales, with eighteen items from each scale that correspond with the five personality domains, and has 90 items. The five sections are:

**Neuroticism:** It includes facets like anxiety, depression, self-consciousness, impulsiveness, vulnerability etc.

**Extraversion:** It includes facets like warmth, gregariousness, assertiveness, excitement, positive emotions etc.

**Conscientiousness:** It includes facets like competence, order, dutifulness, achievement striving, self discipline, deliberation etc.

**Agreeableness:** It includes facets like trust, straightforwardness, altruism, compliance, modesty, tender-mindedness etc.

**Openness to Experience:** It includes facets like fantasy, aesthetics, feelings, actions, ideas, values etc.

M5-PS is scored using a 5-point Likert scale i.e. Inaccurate (1), Moderately Inaccurate (2), Neither (3), Moderately Accurate (4) and Accurate (5) reflecting the informants impressions of the child they are assessing. The negative statements were reverse-scored and higher score represent stable personality.

- **Questionnaire for Cognitive and Non-cognitive Development of Children**

A well structured tool in the form of a questionnaire was prepared to check the Cognitive and Non-cognitive development of children in the age group of 3-6 years. The questionnaire had three sections under Cognitive Development scale viz., Recognition and Comprehension, Problem Solving and Language Development. Similarly, the scale for Non-Cognitive development also had three sections viz., Social Skills, Emotional Maturity and Self-Efficacy. Each statement has three options (Never, Sometimes and Always) scored between 1-3, among which the respondent had to choose the appropriate one. Higher scores represent proper cognitive and non-cognitive development.

In addition, a column for the overall academic performance of the child was recorded in order to get an idea about academic achievement of the child. The grading of percentages was done as per CBSE standards and the nine point grading scale used for measuring scholastic achievements is as below:
Table No. 3.2: Academic Achievement as per CBSE Standard

<table>
<thead>
<tr>
<th>Marks Range</th>
<th>Grade</th>
<th>Grade point</th>
</tr>
</thead>
<tbody>
<tr>
<td>91-100</td>
<td>A1</td>
<td>10.0</td>
</tr>
<tr>
<td>81-90</td>
<td>A2</td>
<td>9.0</td>
</tr>
<tr>
<td>71-80</td>
<td>B1</td>
<td>8.0</td>
</tr>
<tr>
<td>61-70</td>
<td>B2</td>
<td>7.0</td>
</tr>
<tr>
<td>51-60</td>
<td>C1</td>
<td>6.0</td>
</tr>
<tr>
<td>41-50</td>
<td>C2</td>
<td>5.0</td>
</tr>
<tr>
<td>33-40</td>
<td>D</td>
<td>4.0</td>
</tr>
<tr>
<td>21-32</td>
<td>E1</td>
<td>C</td>
</tr>
<tr>
<td>00-20</td>
<td>E2</td>
<td>C</td>
</tr>
</tbody>
</table>

Source: www.cbse.nic.in

3.4 Scope of the Study: The scope of the study has been confined to working conditions of mothers and personality development of children residing in Kashmir division of J&K state. The sample of working women has been drawn from four districts viz; Srinagar, Anantnag, Ganderbal and Baramulla as these districts represent rural and urban population adequately. Four major sectors of employment (Health, Education, Banks and Judiciary) were selected for sampling procedure. Purposively, only those women were chosen for the study, who had children between 3-6 years of age. As early development is more critical and important than later development, that’s why children between 3-6 years of age were selected for sampling. An in-depth study has thus been undertaken to examine effects of working conditions of mothers on the personality development of children.

3.5 Pre-Testing: Pre-testing was done on 10% of the sample size from each district to ensure the validity and feasibility of questionnaire before administering it on the entire sample population. On the basis of pre-testing necessary modifications were made. Pre-tested sample was excluded from the study.

3.6 Data Analysis: The data obtained from questionnaires was coded as per statistical packages for social science (SPSS) and was checked for any entry error. Various statistical techniques were used as per the need and objectives of the study. The data was described using percentages and Pearson’s coefficient of correlation (two-tailed).

In the present chapter, the methodological tools and procedures used in the study has been put forth. As results are the main part of any research work, therefore in this connection the chapter that follows has been devoted to illustrate the results and discussions of the present study.