The methodology of the study has been described under following heads -

3.1 Locale of the study
3.2 Sampling design
3.3 Tools and Techniques
3.4 Collection of the data
3.5 Analysis of the data
3.1 LOCALE OF THE STUDY

3.1.1 Selection of the district:

The study is confined to Azamgarh district (UP) because the investigator belongs to this district. Urban area of Azamgarh district has been purposively selected.

3.1.2 Selection of Wards:

At the second stage of wards selection a list of all wards in Azamgarh district was prepared and eight ward were selected out of 25 wards due to the presence of sample required for study (had population of children going to school) and they were also adjacent to the investigator’s home. Fig.1 gives the location of the selection of the selected area for study.

The population, total families and families with children in the age group of 6-12 years of the wards are presented in Table 3.1.1
<table>
<thead>
<tr>
<th>S. N</th>
<th>Selected Ward</th>
<th>Total Population</th>
<th>Total No. of family</th>
<th>Total No. of family with children age group of 6-12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ward-1 Farashtola</td>
<td>3750</td>
<td>593</td>
<td>262</td>
</tr>
<tr>
<td>2</td>
<td>Ward-12 Harbanshpur</td>
<td>3962</td>
<td>623</td>
<td>149</td>
</tr>
<tr>
<td>3</td>
<td>Ward-5 Jalandhari</td>
<td>4091</td>
<td>676</td>
<td>302</td>
</tr>
<tr>
<td>4</td>
<td>Ward-6 Gurutola</td>
<td>4055</td>
<td>634</td>
<td>122</td>
</tr>
<tr>
<td>5</td>
<td>Ward-8 Aarazibag</td>
<td>3358</td>
<td>665</td>
<td>90</td>
</tr>
<tr>
<td>6</td>
<td>Ward-9 Bazbahadur</td>
<td>5712</td>
<td>1004</td>
<td>395</td>
</tr>
<tr>
<td>7</td>
<td>Ward-10 Katra</td>
<td>4050</td>
<td>543</td>
<td>97</td>
</tr>
<tr>
<td>8</td>
<td>Ward-11 Ashifganj</td>
<td>3405</td>
<td>673</td>
<td>179</td>
</tr>
</tbody>
</table>

### 3.2 SAMPLING DESIGN:

For selecting sample of families the list of total families in each selected ward was prepared for these families having at least one woman with a school going child on the ground of working women.
There after 200 women in total was selected on the basis of proportionate random sampling from the list of families of all selected ward. One child of the selected women was included in the study from each family be thus 200 children were purposively selected for the study.

3.3 TOOLS AND TECHNIQUE:

A comprehensive schedule was developed in cooperating all information selected to family profile of the children. (Appendix A) The data were collected through personal interview method. The schedule induced details on family structure, age of children, gender of Children, and family income, family size, and family type, occupation of parents and education of parents.

Draw a man test for Indian children (By Dr. Pramila Phatak) was used to assess the intelligence level of the selected children (Appendix-B).

3.4 COLLECTION OF THE DATA:

After the basic survey of the population the parents of the selected families were approached. A good rapport was established with parents especially mother of the child and the purpose of the study
was explained. They were assured that the study was academic in nature. They were requested to respond to the questions of the schedule put to them to the best of their ability and knowledge.

Standard recommended procedure as given in the Draw-a-man test was followed in administered of the tool and data collection (Appendix-C). The data were collected were recorded, consolidated, tabulated and analyzed.

3.5 ANALYSIS OF THE DATA:

The data obtained was analyzed manually and also with the help of computer. The profile of the family of the selected children were obtained from interview schedule. It was analyzed in percentage distribution in each of the categories separately due to the nature of data which was unevenly distributed with regard to assessment of level of cognitive ability, Standard procedure for obtaining mental age from raw score were followed and intelligence quotient (IQ) was obtained by the following formula;

\[
\text{IQ} = \frac{\text{Mental Age}}{\text{Actual Age}} \times 100
\]
Thus social quotient was obtained for every child. The children were then placed in various categories as having good average and poor intelligence level.

The child care presents among working women was analysed by scoring of each items according to its importance. Total score was obtained by summation of their scores for each child. Thus, obtained score was categories as children having Poor (32-42), Average (42-55), Rich (55-66) care.

**Percentage (%) :**

The frequency of a particular cell was divided by the total number of respondents in that particular category and multiplied by 100 for calculating percentage.

**Chi- Square ($X^2$) :**

Further the non parametric chi-square test was done to assess the independent hypothesis. Chi-square test represents a useful method of comparing experimentally obtained results with the equation as stated below.
\( (o_i - e_i)^2 \)
\[ \chi^2 = \Sigma \frac{\text{----------}}{e_i} \]

Where -

\( O_1 \) = Frequency of occurrence of observed or experimentally obtained results.

\( e_1 \) = Expected frequency of occurrence on same hypothesis.

The degrees of freedom:

\[ df = (c-1)(r-1) \]

\( c \) = number of columns and \( r \) = number of rows.

Hypothesis is tested as follows -

Ho1 - Child care practices is independent from maternal employment.

Ho 2 - Child care practices is independent from intelligence level of children.

Ho 3 - Occupation of mother is independent from intelligence level of children.

Ho 4 - Intelligence level is independent to age, sex and education level of children.
Ho 5 - Intelligence level is independent to family profile of the children.

Ho 6 - Intelligence level is independent to other environmental factor of children.

The hypothesis Ho was accepted when the calculated value was less than the tabulated value and the hypothesis was rejected when the calculated value is more than the tabulated value.

**Coefficient Correction (r):**

The coefficient correlation is a measure of mutual relationship between the two variables i.e. x and y. Where the relationship is measured by what is commonly termed as the product moment correlation it computed by the following formula –

\[
r = \frac{\Sigma x'y' / N - ( cx')( cy')}{(\sum x')(\sum y')}
\]

**t-value:**

Further the t-value test was done to assess the null hypothesis. t-value test represents a useful method, to know
significance differences for independent variables on dependent variables with equation as stated below

\[
\frac{M_1 - M_2}{\sigma d} = t
\]

Where -

\[
M_1 = \text{Mean of the first observation}
\]

\[
M_2 = \text{Mean of the second observation}
\]

\[
\sigma d = \text{Standard error of differences or SEd}
\]

The data analyzed was tabulated and discussed.

**Limitations of the study** -

The present study, due to its nature had certain delimitations. Since the study was focused on the working mother so the sample was chosen from only working mother. Only one child belonged to age group of 6 to 12 year from one family on the ground of working women was included in the study. It is not possible to take interview of working mothers at their working periods. Respondents were selected from only eight wards of Azamgarh district i.e. Farashtola, Harbanshpur, Jalandhari, Gurutola, Arazibag, Katra, Asifganj, Bajbahadur following proportionate random sampling technique.