CHAPTER II

METHODOLOGY
Research in any discipline is a ceaseless effort so in the quest of carrying out the study every researcher has to take utmost care in carrying out research work in scientific manner. The present investigator took certain concrete steps in the process of pursuing research. In chapter-I comprehensive description of the meaning and concepts of the variables studied were highlighted and review of relevant research literature was presented and thereafter methodology opted for the investigation is being presented in the present chapter-II and in chapter-III results and discussions are given.

In any scientific research methodology plays a very significant and crucial role. According to Edwards (1971) “in research we do not haphazardly make observation of all or any kinds, but rather our attention is directed towards those observations that we believe to be relevant to the question we have previously formulated. The objective of the research, as recognized by all sciences is to use observation as a basic for answering question of interest.”

Research fill the void of knowledge, hence, consequently provides some new knowledge. In all researches, the objective of the investigation is contingent upon the accuracy of research methodology. The choice of
methodology of research is determined by the nature of the problem because every specific research demands and requires a particular process and operation to be undertaken for carrying out the investigation.

In carrying out any scientific research, it is necessary to carefully adopt appropriate research design, selecting standardized tools, choosing appropriate sample through appropriate sampling technique, undertaking sound procedure for collecting data, tabulating them, and then analyzing the data by applying most suitable statistical techniques for the purpose of drawing meaningful conclusions. The details of the methodological steps are as follow:

**Sample:**

In general sample is a small portion of a specific population or universe as representative of that particular population or universe. Mohsin (1984) stated that “a sample is a small part of total existing events, objects, or the information.” For selecting appropriate sample for this type of research the random sampling technique is found to be more suitable in conducting the study. In this sampling technique, every individual gets the equal chance of being selected in the sample. This sampling technique was an appropriate in the very context of the present research endeavor.
The sample comprised of 400 subjects studying in different senior secondary schools of Jammu and Kashmir. The sample were drawn from two types of locations (1) those areas where exposure to insurgency is consistently high (Kashmir region), and (2) those areas where exposure is relatively least (Jammu region). Under the first category those areas were identified where people are often facing insurgencies and militant attacks. The schools located in different areas of Srinagar district taken includes: Lai Chowk, Zaina Kadal, Khanayar, Illahibagh, Safa Kadal, Lal Bazar and Hawal. The second categories of the respondents were selected from the schools where least insurgency and militant attacks were found. These areas were taken from Jammu region that includes Kanakmandi, Gandhi Nagar, Shalimarchowk, Gujarnagar, Khatitallav, Channihimmat and Narval. 200 subjects were selected from Srinagar out of which 100 were male with the age range (16-19 yrs) and 100 were female with age range (17-19 yrs). The rest 200 subjects were taken from Jammu region comprising of male (16-19 yrs) and female (17-19 yrs). The mean age of the male subjects was found to be 17.66 years and the mean age of the female subjects was 18.00 years respectively.
The distribution of the sample is as follows

N=400

KASHMIR
(Highly exposed region)
(200)

Male
(100)
Female
(100)

JAMMU
(Least exposed region)
(200)

Male
(100)
Female
(100)
Tools:

To measure and understand human behavior psychological tests are developed and used. It is a matter of fact that there is not a single tool or psychological instrument, which may tell about all aspects of behavior because of complex and varying psycho emotional attributes of personality and human behavior dimensions.

However, questionnaire since long have been most favored and convenient tool in psychological researches. In the present investigation three questionnaires were used. The details of each questionnaire used are as follows.

(1) Stress Measuring Scale: The present researcher constructed this scale to measure the stress level of the adolescents exposed to insurgency; there was no other test available for this type of research, so it became essential to develop a scale as per the requirements of this study. For this purpose the survey of literature was extensively done to frame items/statements to be included in the scale. In the first phase 30 items were framed and after making proper editing of the items, pilot study of the scale containing 30 items was done on a group of 100 adolescents in Kashmir valley and finally 20 items/statements were retained after item analysis. The scale with 5-
point response category (1 for i.e. Not at all to 5 foe maximum i.e. extremely) was administered to the Ss (both male and female).

To ascertain the relevance of the items, item analysis was done; all items were found significant at 0.01 level of confidence. To confirm the reliability/dependability of device, split-half reliability was calculated and reliability coefficient was found $r = 0.94$ which confirm high reliability. In this way stress-measuring device is considered to be a standardized scale.

(2) Mental Health Inventory: The Mental Health Inventory (MH) developed by Jagdish and A.K Srivastava (1983) has been used to measure mental health of the individuals. MH scale was found more suitable to measure the mental health of subjects. The items included in this scale have the symptoms of mental health along with the absence of mental ill health. It contains 55 items representing six dimensions.

(i) Positive Self Evaluation (PSE) consists of 10 items out of which 6 items are positive and 4 negative.

(ii) Perception Of Reality (PR) includes 8 items with 4 positive and 4 negative.

(iii) Integration Of Personality (IP) consisted of 12 an item out of which 1 item is positive and rest 11 is negative.
(iv) Autonomy (AUNTY) consisted of 6 items out of which 2 items being positive and 4 negative.

(v) Group Oriented Attitude (GOA) consisted of 10 items with 4 positive and 6 negative, and

(vi) Environmental Mastery (EM) consisted of 9 items with 6 positive and 3 negative.

The reliability of the inventory was determined by split half method using odd-even procedure. The reliability coefficient of different dimensions of mental health and overall mental health was determined.

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Dimensions of Mental Health</th>
<th>Reliability Index</th>
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<tbody>
<tr>
<td>1.</td>
<td>PSE</td>
<td>.75</td>
</tr>
<tr>
<td>2.</td>
<td>PR</td>
<td>.71</td>
</tr>
<tr>
<td>3.</td>
<td>JR</td>
<td>.72</td>
</tr>
<tr>
<td>4.</td>
<td>AUTNY</td>
<td>.72</td>
</tr>
<tr>
<td>5.</td>
<td>GOA</td>
<td>.74</td>
</tr>
<tr>
<td>6.</td>
<td>EM</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td><strong>OVERALL</strong></td>
<td><strong>.73</strong></td>
</tr>
</tbody>
</table>

Construct validity of the inventory was determined by finding coefficient of correlation between scores on Mental Health Inventory and General Health Questionnaire (Goldberg, 1978). It was found to be .54.
(3) **Aggression Questionnaire:** Aggression Questionnaire was developed by Buss and Perry (1992). There are 29 items in the scale which measures aggression relating to four factors viz; Physical Aggression (PA), Verbal Aggression (VA), Anger (A) and Hostility (H). Each statement to be rated on the 5-point response category. The respondents are instructed to assign 1 for “not at all” to 5 for “extremely present”. Its four dimensions were reported to have alpha coefficient of 0.72 to 0.85, indicating adequate internal consistency and test-retest coefficient of 0.72 to 0.80 showing acceptable reliability.

**Biographical Information Blank (BIB):** Apart from the above questionnaire, BIB was also prepared by the researcher to record various demographic information of the respondents such as age, sex, region, educational qualification, which help a lot in drawing inferences from the findings.

**Procedure:**

A research is conducted in a well planned manner, so it is important for an investigator to follow systematic procedure during data collection particularly in a study of this nature. It is a very interesting phase of
research because after literature review and fulfilling other academic aspects of research planning, in this phase an investigator actively participates in the work to gather information from the respondents. Data is collected individually having face-to-face interaction. The subjects were contacted in their schools with the help of the teachers concerned at their convenience. The researcher established good rapport with the respondents prior to the administration of the tools on them. The investigator introduced herself and took them into confidence by explaining briefly about the research plan. After this, the scales were handed over to the subjects and were told to read the instructions carefully before responding. The investigator fully assured the confidentiality and use for research purpose only. In general subjects took almost 50-60 minutes in giving responses for the items concerning Stress Measuring Scale, Aggression Questionnaire and Mental Health Inventory.

Many persons in the process of data collection by the researcher were contacted, some of them showed their unwillingness to serve as respondent and fill the questionnaire, however, constant effort was made, spending considerable time in this phase of work so that the respondents who were genuinely interested and mentally prepared to cooperate would constitute
our sample so as the importance of this phase of research work cannot be underestimated.

The information was gathered and analyzed to draw some conclusions largely depend upon the seriousness and genuineness of which the data is collected. Therefore, the researcher took all possible precautions in administering the questionnaires to gather relevant information from the adolescents of Jammu and Kashmir regions.

Analysis of Data:

Once the data is collected, researcher transforms and summarized data so that results could be interpreted and communicated in a systematic and comprehensive manner. So, statistical method is very important as Kerlinger (1983) opined that “statistics, via its power to reduce data to manageable forms and its power to study and analyze variance enable scientists to attach probability theory and inferences they draw from data.” Statistics, using probability theory and mathematics, simply makes the process more exact. In other words, it is to say that through statistics we always make inferences, attach probability to various outcomes or hypothesis, and make decision on the basis of statistical reasons. Selection
of appropriate statistics is a very important objective for the study, which helps in fulfilling the objective and drawing precise and accurate inferences.

In the present investigation, descriptive statistics is done to get the overall picture of the data collected. Independent sample t-test is used to check the significance of difference. Since the sample is drawn randomly, therefore normality of the group distribution is found using Kolmogorov-Smirnov test. Mann Whitney test is done for comparison of mean scores for non-normal distribution. Two-way ANOVA is also used for testing the significance of difference with regard to gender and region. Regression analysis is done to see the equation of mental health on stress, aggression and its four dimensions.