CHAPTER- 4

METHODOLOGY

A research is a scholarly pursuit of fact which can be attained with the help of a study, assessment, comparison and experimentation. In early twenties Woody (1927) described research as encompasses of “defining and redefining solutions; collecting, organizing and evaluating data; making decisions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis”. The formulation of a problem becomes essential in order to carry out a research in any field. The methodology turns out to be a mode to analytically working out that research problem. The objectivity of a research is dependent upon the accuracy of methodology taken up by the research investigator. Therefore sound methodology is an essential part of any research unless and until it is done in an organized and planned manner. The current research is an endeavor in this direction.

Old age comprises of a series of processes which continues till death. At this stage the person looks back his life retrospectively. With the changing circumstances one has to adjust and make compromises. The changes that go together with old age, one has to be flexible enough to be at par with the contemporary society. Otherwise a lot of problems and challenges pose hindrances in his/her way. Generally the old people feel social isolation and loneliness which can further lead to cognitive and motor impairment, anxiety and depression. Unfulfilled expectations from family, relatives and children, sufficient time for self scrutiny and craving make them more vulnerable. Moreover there is no one to listen to so that they can unload the burden. Loss of spouse, relatives, siblings and close friends and other bereavements leave them in anxiety regarding death. “Living alone, health problems and disability, sensory impairment such as hearing loss, and major life events such as loss of a spouse have all been identified as risk factors for social isolation and loneliness” (Grenade and Boldy, 2008). In the recent years there has been an emergent prominence in the area of gerontology to look at various issues which are related to old people. In the current research the issues like adjustment, loneliness, hopelessness, death anxiety and depression in older people who are in two age groups and who are cohabitating and who are not. Thus present research was planned “to study
adjustment, loneliness, helplessness, death anxiety and depression among elderly people”. Thus the following methodology was executed to accomplish the goals and objectives of the current research and to substantiate the hypotheses intended in the previous chapter. The current chapter covers the following:

- Research Design (Adopted in the current study)
- Sample (Selection of sampling technique and description)
- Tools (Standardized tests used, their administration process and scoring method)
- Procedure (Tangible course of action)

**DESIGN**

In the current study 2x2x2 factorial design was employed. This factorial design was applied to study adjustment patterns, loneliness, helplessness, death anxiety and depression among elderly people. The elderly people were in either of two levels of age i.e. 65- 74 years (older old) and 75- 84 years (oldest old), having either of two types of living arrangements i.e. living with family and living without family and having either of two categories of gender i.e. male and female.

**Table 4.1: Category wise distribution of Elderly People**

<table>
<thead>
<tr>
<th>Gender (c)</th>
<th>Age levels (a)</th>
<th>Living Arrangement (b)</th>
<th>Living with Family (b₁)</th>
<th>Living without Family (b₂)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>↓</td>
<td>Male (c₁)</td>
<td>Female (c₂)</td>
<td></td>
</tr>
<tr>
<td>65- 74 yrs(Older old) (a₁)</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>75- 84 yrs (Oldest old) (a₂)</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>Grand Total=400</td>
</tr>
</tbody>
</table>
Thus the present study contains three types of independent variables. First independent variable was age varied at two levels i.e. 65- 74 years (older old- $a_1$) and 75- 84 years (oldest old- $a_2$), the second independent variable was living arrangement varied at two levels i.e. living with family $(b_1)$ and living without family $(b_2)$ and the third independent variable was gender i.e. male $(c_1)$ and female $(c_2)$. The dependent variables are adjustment, loneliness, helplessness, death anxiety and depression.

**SAMPLE**

A purposive sample of 400 urban community dwelling elderly that were in the age range of 65- 84 years both males and females was selected on the basis of their availability. The current sample was selected from Haryana state. Out of these 400 elderly, 200 were elderly living with family i.e. with spouse, children and grandchildren whereas 200 were elderly living with spouse but living without family i.e. without children. These 400 elderly people were divided into eight groups (Table 4.1): older old male living with family, older old male living without family, older old female living with family, older old female living without family, oldest old male living with family, oldest old male living without family, oldest old female living with family and oldest old female living without family (50 in each group).

**TOOLS**

The tools given below were administered to the selected sample:

1. Personal data sheet
2. Shamshad Jasbir Old Age Adjustment Inventory
3. The Revised UCLA Loneliness Scale
4. Learned Helplessness Scale (LHS)
5. Death Anxiety Scale- Extended
6. Geriatric Depression Scale- Hindi Version

**1. Personal Data Sheet**

A personal data sheet containing the full information regarding the demographic variables was procured (Appendix- A).
2. Shamshad Jasbir Old Age Adjustment Inventory
This inventory was prepared by Shamshad and Jasbir in 1995 to assess the adjustment problems encountered by elderly people. It contains 125 items which are divided into six domains of adjustment i.e. “health, home, social, marital, emotional and financial”. The respondents are asked to tick mark on the items applicable to them either in ‘Yes’, ‘No’ and ‘?’ The answered responses have been allotted one score. Higher score indicate better adjustment. The reliability was found to be .80 and the construct validity was found to be between 0.54 to 0.70 for various domains and for total score it was found to be 0.85 (Appendix- B).

3. The Revised UCLA Loneliness Scale
This scale was developed by Russell, Peplau and Cutrona in1980 which measures loneliness. It is comprised of 20 statements having 4 point scale ranging from ‘often’ (4) to ‘never’ (1) for statements depicting loneliness and ‘never’ (1) to ‘often’ (4) for statements not depicting loneliness. The possible scores of the scale could range from 20-80. The overall score represents total level of loneliness and higher scores indicate greater loneliness. The internal consistency reliability was found to be in the range of 0.89 to 0.94 (Appendix- C).

4. Learned Helplessness Scale (LHS)
The above test was used in the current study to evaluate the helplessness of elderly people. This was devised by Quinless and Nelson in1988 which contains 20-items which are based on 4-point Likert scale ranging from strongly agree (1) to strongly disagree (4). The possible scores range from 20- 80. Higher scores indicate high degree of learned helplessness. The correlations were calculated with Beck’s Hopelessness Scale (0.252), Rosenberg’s Self-Esteem Scale (0.622), and alpha reliability was found to be 0.85 (Appendix- D).

5. Death Anxiety Scale- Extended
This scale of death anxiety was utilized in the present study which was developed by Templer et al. in 2006. This contains 51 items with ‘true’ or ‘false’ alternatives. Higher
scores indicate greater death anxiety. The correlation coefficient with Death Anxiety Scale was found to be 0.81 and with Death Anxiety Scale–New it was 0.97. The internal consistency was found to be 0.92 (Appendix- E).

6. Geriatric Depression Scale- Hindi Version
This depression was devised by Ganguli et al. in 1999 to assess the level of depression in elderly people. It is comprised of 30 statements with ‘Yes’ or ‘No’ response. Scoring has been written besides ‘Yes’ or ‘No’ categories as zero or one and one or zero. Higher scores indicate high level of depression. The split half reliability was found to be .82 and the validity with Hamilton Depression Scale was .90 and with Zung Depression Scale it was .87 (Appendix- F).

PROCEDURE
The current study focused on assessing adjustment patterns, loneliness, helplessness, death anxiety and depression among elderly people. To fulfill this, participants were contacted personally at their residences i.e. door to door survey, parks and community centers for data collection. First of all the purpose of the study was made clear to the participants to establish a proper rapport. An individual contact was made with each participant and a written consent was procured from them and was ascertained about the confidentiality. They were made clear of his/ her right to opt out of the study at any point during the study without having to give reason for doing so.

In the current research The Revised UCLA Loneliness Scale, Learned Helplessness Scale (LHS) and Death Anxiety Scale- Extended were used but these were firstly translated into Hindi by the present researcher. It was followed by back translation technique. The procedure was as follows: Firstly the original scale in English version of The Revised UCLA Loneliness Scale was translated into Hindi by two experts separately who were well versed with both the languages. And then one final draft in Hindi language was made. This Hindi version was again given to two experts who were also well versed with both the languages to translate into English and then final draft of English language was completed. The scale in three different versions like original English, final draft of translated Hindi and final draft of retranslated English were
administered to thirty elderly people. The interval gap of 15 days was given in filling each version. The counterbalancing technique was taken care of while administering the scale. The scoring was done according to the norms given in the manual. Firstly t- test was employed for the scores obtained in original English version and the retranslated version of English and the value obtained on t- test was found to be 1.09 not significant reflecting that there existed no difference between original English and translated English thus showing the similarity between the two. After that Pearson coefficient of correlation was computed between the scores obtained for translated Hindi version and original English version. It was calculated to be highly significant (.89). This is indicative of quite appropriate validity.

Similar procedure was adopted for Learned Helplessness Scale (LHS) and Death Anxiety Scale- Extended. It was observed that on Learned Helplessness Scale (LHS) t- value was found to be 0.90 between original English version and the retranslated version of English and correlation was found to be .91 showing high validity. And on Death Anxiety Scale- Extended the t- value was 1.33 n.s. and correlation was found to be .87 depicting high validity.

After this procedure appropriate and suitable instructions were given for every scale to each of the participant. As soon as the general instructions were provided related to testing, the tests were administered one after the other. This was assured that each respondent has comprehended the way of responding. It was also made clear that every participant has responded to all the statements of all the scales. All efforts were made to complete the administration of scales in a single session but keeping in mind the age of respondents the administration was extended to two sessions. The researcher handled the various difficulties in the process of data collection and with honesty and genuineness collected the desired data. After the data was collected, the scoring was done according to the norms given in the respective manuals.

STATISTICAL ANALYSIS

The collected data was entered in the Microsoft excel and was analyzed using SPSS- version 16 Microsoft software. The data collected was analyzed by using suitable
statistical methods such as descriptive analysis in the form of mean, S.Ds, inferential analysis in the form three way ANOVA and the graphical presentation was given wherever applicable.