Chapter III

Research Methodology
In this chapter, the researcher has presented the details regarding the methodology used for the present study. Specific information relating to the various components of researcher design such as sampling, tools of data collection, statistical methods used and the other aspect of the study’s operational design have been described in detail.

**Statement of the problems**

Aging is not only biological in nature but also a cultural process. Physical, social and emotional changes require adjustment with the family and neighborhood. Like babies, the aged have to depend on the children relatives friends or homes for the aged. One reason for such dependency is that they do not have the financial resource to maintain themselves.

Like every other period in the life span, old age is characterized by certain physical and psychological changes and the effect of these changes on the individual determines to a large extent whether he will make good or poor personal and social adjustment. The characteristics of old age, however, are far more likely to lead to poor adjustment. Physical, social and emotional changes then over take the individual, as the age demands adjustment on one’s part in the family and in the neighborhood in the interest of one’s own happiness. The majority of older persons in India have not much of education to use their leisure time well through reading or other recreations.

The term senility is used to refer to the period during old age when a more or less complete physical breakdown takes place and when there is mental disorganization, these individuals who become eccentric, careless, absent minded, socially with drawn and poorly adjusted are usually described as senile. Decline comes partly from physical and partly from psychological deficits. Unfavorable attitudes towards one’s self, other people’s work, and life in general can lead to senility. As a result, they go downhill both physical and mentally and may soon die. How the individual copes with strains and stresses of living will also affect the rate of his decline.
As difference increases with age, they predispose individuals to react differently to same situation. For examples, some men think of retirement as a blessing while others regard it as a curse. Physical aging precedes mental aging. Though, sometimes, the reverse is true especially when the individual is concerned about growing old and let go mentally when the first signs of physical ageing appear. Feeling useless and unwanted elderly, people develop feeling of inferiority and resentment - feelings that are not conducive to good personal or social adjustment.

**Significance of the Study**

Various studies have shown that the problem of old age in developing countries like India, is not acute compared to the seriousness of the problem in western societies. But considering the gradual rise in the number of the aged in the population of the country and the rapid changes due to industrialization and urbanization, it is necessary to use highest caution and protect our culture and norms, that provide accommodation to every member of the society.

Moreover, the vast majority of the elderly live in rural areas. It is from this point of view that this research has been undertaken to study the social life and the problems. The elderly face due to acute poverty in the rural areas.

**Scope of the study**

This study deals with personal, economic, health, family, religious, psychological and social aspects of the elderly and also association among various variables has been dealt with further more. The areas like the economic status of the children, older persons’ adjustment to various conditions, the extent of depression and hopelessness experienced by the elderly, their life satisfaction and conditions and problems have been studied.

**Aim of the Study**

To study the psycho-social conditions and problems of older persons in rural and urban areas of Tiruchirappalli District.
Objectives

- To study the socio-demographic profile of older persons
- To find out the economic conditions of the older persons
- To find out the health aspects of the older persons
- To assess the psychological aspects of the older persons.
- To understand the socio-religious aspects.
- To study the level of life satisfaction among the older persons.
- To study the level of adjustment among the older persons.
- To study the level of hopelessness among the older persons.
- To study the level of depression among the older persons.
- To study the association among all the above mentioned variables.

Background Variables

1. Age
2. Martial status
3. Religion
4. Educational qualification
5. Nature of job
6. Monthly income
7. Number of dependents of family
8. Present employment
9. Belief in God
10. Practice of Religious Worship

Key Variables

1. Depression
2. Hopelessness
3. Adjustment
4. Life-Satisfaction
Research Hypotheses

The researcher has framed twenty specific directional hypotheses as given below. The main premise on which the researcher has framed the hypotheses comprises of gender differences among the older persons, rural-urban differences and differences between young-old and old-old persons. The justification for the above three categories lies in the literature review explained in Chapter II. As it can be seen clearly from the various studies reviewed, differences do exist between male vs female, rural vs. urban and young-old vs. old-old persons with regard to many of their characteristics. Even though, there are not many studies concerning such differences with regard to the key variables of this investigation, considering the general differences in terms of socio-demographic characteristics, health conditions and other aspects of the life, the researcher felt that there will be statistically significant differences among the different categories of older persons with regard to depression, hopelessness, adjustment and life-satisfaction. It is with this idea the researcher has framed the following research hypotheses:

1. Older persons living in urban areas have a higher level of depression when compared to the Older persons living in rural areas.

2. Older persons living in urban areas have a higher level of hopelessness when compared to the Older persons living in rural areas.

3. Older persons living in urban areas have a higher level of adjustment when compared to the Older persons living in rural areas.

4. Older persons living in urban areas have a higher level of life-satisfaction when compared to the Older persons living in rural areas.

5. Male older persons living in urban areas have a higher level of depression when compared to the female older persons living in rural areas.

6. Male older persons living in urban areas have a higher level of hopelessness when compared to the female older persons living in rural areas.

7. Male older persons living in urban areas have a higher level of adjustment when compared to the female older persons living in rural areas.
8. Male older persons living in urban areas have a higher level of life-satisfaction when compared to the female older persons living in rural areas.

9. Male older persons living in urban areas have a higher level of depression when compared to the male older persons living in rural areas.

10. Male older persons living in urban areas have a higher level of hopelessness when compared to the male older persons living in rural areas.

11. Male older persons living in urban areas have a higher level of adjustment when compared to the male older persons living in rural areas.

12. Male older persons living in urban areas have a higher level of life-satisfaction when compared to the male older persons living in rural areas.

13. Female older persons living in urban areas have a higher level of depression when compared to the female older persons living in rural areas.

14. Female older persons living in urban areas have a higher level of hopelessness when compared to female older persons living in urban areas.

15. Female older persons living in urban areas have a higher level of adjustment when compared to the female older persons living in rural areas.

16. Female older persons living in urban areas have a higher level of life-satisfaction when compared to the female older persons living in rural areas.

17. Young-old persons have a higher level of depression when compared to the Old-old persons.

18. Young-old persons have a higher level of hopelessness when compared to the Old-old persons.

19. Young-old persons have a higher level of adjustment when compared to the Old-old persons.

20. Young-old persons have a higher level of life-satisfaction when compared to the Old-old persons.
Definitions of Concepts

Older Person

According to Hurlock (1990), the last stage in the life span is frequently subdivided into early old age, which extends from the age sixty to age seventy and advanced old age, which begins at seventy and extend to the end of life. The term 'older person' refers to persons aged 60 or above living in the rural and urban areas of Tiruchirapalli District covered by the study.

Psycho-Social Conditions and Problems

These two factors are inter-related and one factor may be responsible for the causation of the other problem. Conditions like rejection by the family and society, loss of earning, death of spouse and friends can create psycho-social problems.

Depression

"The term depression refers to resistant sad mood and or loss of interest or pleasure in most activities. It is not a weakness. It is a medical illness and is treatable." In this study, the researcher has used Beck’s Depression Inventory (1998) to assess the level of depression among the respondents.

Hopelessness

"Hopelessness is a system of cognitive scheme in which the common denominator is negative expectancy about the short and long-term future “Stotland (1969) In this study the researcher has used the Hopelessness Scale by Beck and Wiseman (1974) to measure hopelessness or pessimism among the respondents.

Adjustment

“A harmonious relationship with the environment is possible only when one is able to obtain satisfaction for most of one’s needs, and meets fairly well the demands, physical and social one.” Brand & Smith (1974) In this study, the researcher has used Adjustment Problems Inventory for Older Persons (P.V. Ramamurti, 1968) to find the level of adjustment among older people in the rural and urban areas of Tiruchirapalli district cover by the study.
Life satisfaction

According to Hurlock (1981) life satisfaction among older people is “happy memories of childhood and adulthood, freedom to pursue a desired life style with out outside interference, a realistic attitude towards, and acceptance of the physical and psychological changes that ageing inevitably brings, acceptance of self and present living condition even if these fall below expectations, an opportunity to establish a satisfying, socially acceptable pattern of life, continued participation in interesting and meaningful activities, acceptance and respect from the social group, financial situation adequate to meet needs and wants and enjoyment of recreational activities planned for the elderly” In this study the researcher has measured life-satisfaction using the Life Satisfaction Scale (Havighurst, 1971).

Pilot Study

In the preparatory stage of the study, the researcher visited the elderly people in rural and urban areas of Tiruchirappalli district to finalize the setting of the study. During the visit, the researcher first met the area corporation counselors and they assured full support to facilitate data collection in the study. During the visit, the researcher also interviewed a few elderly people to understand their problems. The pilot visit enabled the researcher to finalize various important aspects, which could be incorporated in the study.

Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose. The researcher adopted the descriptive cum diagnostic research design. According to Kothari (1991), while Descriptive design is concerned with describing the characteristics of the study population, diagnostic study involves the association between variables. The characteristics of the elderly are portrayed and specific categories of Older persons are compared i.e. rural and urban male and female Older persons and young old and Old-old persons.

Universe and Sampling

The universe/population of the study includes all persons aged 60 and above living in the rural and urban areas of Tiruchirappalli district. Using multi-stage a
sampling procedure, initially, the researcher selected two wards randomly from the total number of wards in Tiruchirappalli city and from the rural areas surrounding Tiruchirappalli, the researcher selected two villages from a randomly selected block. In the next stage, from the list of older persons in all the selected wards and villages, a sample of 300 older persons was selected using simple random procedure. Efforts were taken to ensure that equal numbers of respondents were chosen from the rural and urban areas.

**Tools of Data Collection**

A semi-structured self-developed Interview Schedule which covered the respondents personal details, demographic data and family constellation.

- Beck's Depression Inventory (Beck, 1998)
- Hopelessness Inventory (Beck and Wiseman, 1974)
- Adjustment Problems Inventory for Older Persons (P.V. Ramamurti, 1968)
- Life Satisfaction Scale (Havighurst, 1971)

**Beck’s Depression Inventory (1988)**

This is an instrument designed to measure the behavioral manifestations of depression. It consists of systematic observation and records of the characteristic attitude and depressed persons. This inventory has 21 categories of symptoms and attitudes. Each category consists of a graded series of 2 or 5 self evaluative statements which are ranked to reflect the range of severity (from neutral to maximal severity) Numerical values from 0-3 are assigned to each statement. Classification of level of depression is based on the scores of the respondents according to the range for each category given by the author.

**Reliability**

The Karl Pearson's Correlation between the odd and even categories studied by the author yielded a reliability co-efficient of 0.86 and with spearman-Brown correlation, this co-efficient was 0.93.
The Hopelessness Scale (1974)

Aaron Beck and Arene Wiseman of the University of Pennsylvania constructed the scale in 1974 to measure hopelessness or pessimism. The scale has 20 true/false items and measures three factors:

Factor I labelled feelings about the future and measured by items 10, 6, 13, 15, and 19 revolved around effectively toned association such as hope and enthusiasm, happiness, faith and good times.

Factor II labelled loss of motivation as defined by items 2, 3, 9, 5, 12, 16, 17, and 20. The item with the heaviest loading are concerned with giving up to deciding not to want any thing and not trying to get something that they wanted.

Factor III labelled future expectations as defined by items 4, 7, 8, 14, 11 and includes anticipation regarding what life will be like, a dark future getting good things, things not working out and the future being vague and uncertain.

Scoring

1. True : 2, 4, 7, 9, 11, 12, 14, 16, 17, 18, 20.
2. False : 1, 3, 5, 6, 8, 10, 13, 15, 19.

9 Scale items were keyed false and 11 as true. Each response was assigned “0” or “1” score and the total hopelessness score is the score is the individual items. The possible range of score is from 0-20.

Reliability

This scale was administered to a population of 294 hospitalized patients who had made recent suicidal attempts. Data was analysed by means of co-efficient alpha (KR-20) that yielded a reliability co-efficient of 0.93.

Validity

The clinicians in each of the studies used an 8-point scale, which included the following indices in arriving at their clinical assessment of severity. Patient believes (a) that he will never get well (b) that he will not solve his problem (c) that the future
looks bleak (d) that he has nothing to look forward to (e) that he will not achieve his goals. The global rating took into account the intensity of the negative expectancies and observable behaviors such as the patient’s tone of voice and facial expression while talking about the future.

**Adjustment Problems Inventory (1968)**

Adjustmental problem inventory developed by P.V. Ramamurti (1968) was used to find out the extent of adjustmental problems in the areas of health, emotion, self, home and social. The same tool was also administered to find out the overall adjustment problems. The reliability and validity of those tools was established by the aforesaid author (1968)

**Scoring**

Score 2 all ‘Yes’ except 10,19,37,38,50,53,58,60,63,68,77,78,83,88,95,99,and 100

<table>
<thead>
<tr>
<th>Area</th>
<th>Score</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
<td>1,6,11,16,etc and every 5th afterwards</td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
<td>2,7,12,17,etc and every 5th afterwards</td>
</tr>
<tr>
<td>Self</td>
<td></td>
<td>3,8,13,etc and every 5th afterwards</td>
</tr>
<tr>
<td>Home</td>
<td></td>
<td>4,9,14,etc and every 5th afterwards</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>5,10,15,etc and every 5th afterwards</td>
</tr>
</tbody>
</table>

The score indicates degree of maladjustment (Adjustmental Problems). The higher the score the higher the maladjustment.

**Reliability**

The reliability and validity for this tool has already been established by Ramamurthi (1968).

The reliability coefficient of the tool is : 0.7220.

**Life- Satisfaction Scale- Havighurst (1971)**

Life -Satisfaction scale by Havighurst (1971) was also administered in this study. The scores are classified as low, moderate and high. Life satisfaction is a satisfaction with the family life, health, functional capacity, activities and distorted cognition.


**Scoring**

Score "I" if they have ticked the following numbers:

1. Agree : 1,2,4,6,8,9,11,12,13,14,17,18.
2. Disagree : 3,5,7,10,15,16.
3. Uncertain : 0
4. Low : Less than 8 ; Moderate : Between 9 and 11 ; High : Above 12.

**Reliability**

The reliability co efficient of the tool is : .7852

**Pre-Test**

The researcher in order to test the relevance of the interview schedule and to determine if the items in the scale to be used were well comprehended by the rural and urban respondents and administered them to each ten respondents for pre-test. The results were found to be satisfactory and hence the interview schedule along with the scale was administered to the rest for further data collection. The twenty respondents used for pre testing were also included in the final sample.

**Data Collection**

Data were collected from the older people living in the rural and urban areas through personal interview. Standardized scales were translated into Tamil for collecting primary data. Literature survey and reference of journals also give more clarity for the researcher in determining the relevant tools of data collection. The collection of data was done from June 30th 2003 to 30th January 2004 by visiting the respondents in Tiruchirappalli District.

**Statistical Analysis of data**

Data, which were collected carefully, were analyzed using basic and advanced statistical procedures keeping in tune with the nature of the data and the objectives of the study. To analyze the data the statistical tools namely, mean, median, standard deviation, chi-square, Students t-test and Karl Pearson’s Co-efficient of Correlation (r) were used.
Chi-Square Test:

It is a basic yet powerful non-parametric test widely used in social science research to study the degree of association between attributes of qualitatively defined variables. It also indicates any significant difference between two or more qualitative groups.

Karl Pearson’s (Correlation Co-Efficient)

A Correlation is association between two variables that takes a value between +1.0 and -1.0. If two variables are positively correlated, then as one increases the other also increases. If they are negatively correlated, then as one increases the other decrease. If they are not associated the correlation is zero. It is an appropriate measure of the strength and direction of relationship between interval scale variables.

Reliability Testing of Tools:

Since three out of the four rating scales used by the researcher have been developed and standardised by western authors in their context, the researcher made an attempt to assess the reliability of all the four scales using Split-Half method with the help of SPSS and the reliability estimates are as follows:

1. Beck’s Depression Inventory => 0.751
2. The Hopelessness => 0.875
3. Adjustment Problem Inventory => 0.848
4. Life-Satisfaction Scale => 0.785

As it can be seen from the above reliability estimates, all the four scales used in the present study have been found to be highly reliable.

Chapterisation

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Chapter II : REVIEW OF LITERATURE
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Chapter IV : RESULTS
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