CHAPTER IV
METHODOLOGY
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This study makes an elaborate and a systematised attempt to observe the existing relationship between two crucial variables, namely, adjustment and its relationship with subscription to Gandhian values among visually impaired youth. For this purpose, much care was taken to adopt a suitable design with due regard to existing principles of scientific research. The methodology adopted for this study is given in detail in this chapter under the following sixteen headings.

4.1 Statement of the problem
4.2 Title of the study
4.3 Objectives
4.4 Variables of the study
4.5 Hypothesis
4.6 Area of the study
4.7 Research design
4.8 Sample for the study
4.9 Tools and techniques used
4.10 Pilot study
4.11 Pre-testing
4.12 Collection of data
4.13 Statistical analysis
4.14 Chapterisation
4.15 Operational definitions and
4.16 Limitations of the study
4.1 STATEMENT OF THE PROBLEM

Although visually impaired persons are an integral part of society, visual impairment as a condition forces them to go off from its mainstream. Particularly the visually impaired youth are to bear not only the consequences of visual impairment, but also to carry the normal load of stress and strain of adolescence and early adulthood. Any rehabilitation programme for the visually impaired persons must ultimately aim at integrating them in the mainstream of the society. Successful integration would mean unreserved function in the social stream and adequate contribution to family and community life. To play a successful role in the mainstream of the society, it becomes imperative to subscribe to a set of practical and meaningful values. Gandhian values are acclaimed world over as more relevant to the present day conditions. Therefore, inculcation of Gandhian values among the visually impaired youth will be a useful proposition if it becomes a part of any rehabilitation programme. If these values are properly inculcated, it would help the visually impaired youth to play a satisfying, successful and contributing role in society. But visual impairment as a condition involves serious psycho-social implications. It per se causes serious adjustment problems to the afflicted both at the personal level and in their interaction with their social and physical environment. Therefore it is necessary to examine whether
the adjustment problems of the visually impaired youth will deter them from assimilating and subscribing to Gandhian values. It is also necessary to further examine whether there exists any relationship between adjustment level and subscription to values among the visually impaired youth. A thorough understanding of the phenomenon would be significant for any initiative towards addressing the adjustment problems and inculcation of Gandhian values among the visually impaired youth.

4.2 TITLE OF THE STUDY

The study is named precisely involving the two clear-cut variables selected for analysis. It is titled “Level of Adjustment and Subscription to Gandhian Values—A Study among Educated Visually Impaired Youth.”

4.3 OBJECTIVES

The following are the specific objectives of the study:

4.3.1 To study the demographic and disability details of the visually impaired respondents.

4.3.2 To assess adjustment, its various dimensions and its level among the respondent group.

4.3.3 To examine the differences in adjustment between/among various categories of respondents.
4.3.4 To study the level of subscription to Gandhian values among the respondent group.

4.3.5 To examine the existing relationship between the adjustment level of the respondent group and their subscription to Gandhian values.

4.3.6 To study the opinion of the respondents on the practicability of Gandhian values and its suitability to present day conditions.

4.3.7 To suggest a module of training to address adjustment problems and inculcate Gandhian values among visually impaired youth.

4.4 VARIABLES OF THE STUDY

This study involves two variables, one "independent" and the other "dependent." The adjustment of respondents is the independent variable and their subscription to Gandhian values is the dependent variable. The independent variable, adjustment, has seven dimensions, namely, anxiety/depression, self-esteem, attitudes, locus of control, acceptance, self-efficacy and attributional style. The dependent variable, subscription to Gandhian values, involves nineteen value items grouped under four headings, namely, principles, contributions, vows and others.
4.5 HYPOTHESES

The following hypotheses (H₀) are framed for this study:

**Adjustment of visually impaired youth**

4.5.1 There exists no difference in adjustment between visually impaired youth groups classified based on age groupings of the National Youth Policy of India.

4.5.2 Male and female visually impaired youth do not differ with regard to their adjustment.

4.5.3 There is no difference in adjustment among/between visually impaired students, vocational trainees, employed and unemployed youth.

4.5.4 Visually impaired youth do not differ in adjustment based on their family's monthly income.

4.5.5 Visually impaired youth do not differ in adjustment based on their skills in independent living.

**Subscription to Gandhian values**

4.5.6 There exists no difference in subscription to Gandhian values between visually impaired youth groups classified based on age groupings of the National Youth Policy of India.

4.5.7 Male and female visually impaired youth do not differ in their subscription to Gandhian values.
4.5.8 The independent variable, the level of adjustment, and the dependent variable, subscription to Gandhian values, do not have any relationship.

4.5.9 There is no relationship between subscription to categorized groups of Gandhian values and adjustment level of visually impaired youth.

4.5.10 There exists no relationship between level of adjustment and subscription to Gandhian values among visually impaired youth categorized based on their gender.

4.5.11 There is no relationship between level of adjustment and subscription to Gandhian values among visually impaired youth grouped based on their age.

4.5.12 Various dimensions of adjustment of visually impaired youth do not contribute to their subscription to Gandhian values.

4.6 AREA OF THE STUDY

The area of the study in general is Tamil Nadu, one of the southern states in India. In this state, specifically four towns, namely, Chennai, Coimbatore, Madurai and Thiruchirapalli were selected (as shown in the map), where the concentration of educated visually impaired persons is prominent due to the presence of educational and vocational service infrastructure. These towns were chosen for
the study with a view to selecting the respondents in line with the inclusion criteria of a minimum pass in the 10th standard.

4.7 RESEARCH DESIGN

Basically this study is of a "diagnostic design." The study followed a probability sampling procedure. Its observational tools were well thought out and rigid instruments, its operations were well planned in advance and its statistical procedures were also pre-planned. Further to this, it involved two clear cut variables one independent and the other dependent. This study also involved well formulated hypotheses for testing and arriving at inferences. And the whole purpose is to see the existing relationship between these variables. Secondly, this study is "applied" in nature as it aims not only to address the problems of a specific need group. So an attempt has also been made to formulate a module of training for addressing the adjustment problems and inculcation of Gandhian values among the visually impaired youth.

4.8 SAMPLE FOR THE STUDY

For selection of the sample, certain inclusion criteria had to be followed for specific reasons. First of all the respondents need to be visually impaired within its definition. Secondly, they should be within the age limit of 13 to 35 years. Thirdly, to minimize the
Map Showing the Places from Where the Respondents were Drawn
chances of the variables under study being influenced by extraneous variables such as marital or health problems, widowed, separated and those with chronic illness were excluded. Most importantly, the study concentrated only on educated visually impaired persons. As such the minimum qualification prescribed was a pass in the 10th standard. The area of the study being Tamil Nadu, in consideration to these inclusion criteria, the units could be found from four major towns, namely, Chennai, Coimbatore, Madurai and Thiruchirapalli, where the institutions serving the visually impaired are located.

The selected institutions in these towns were contacted and all the eligible units were listed in a sampling frame and then the required numbers of units were selected through a complex random procedure of systematic sampling. The units were selected in regular intervals based on the number of required units from each town and the number of eligible units listed in the sampling frame. Every second unit in the frame was selected with due consideration for equal representation from both the genders. Table 4.1 shows the distribution of the units included in the sample. So this study had to follow a purposive sampling for selection of the major four towns and the institutions for the visually impaired
Table 4.1

Respondents Selected from Various Towns/ Institutions

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Towns and the institutions</th>
<th>Total eligible no. of units</th>
<th>No. of units selected Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Chennai</strong> Govt. Industrial Training Center for the Blind. National Institute for the Visually Handicapped.</td>
<td>61</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>2.</td>
<td>Coimbatore Avinashilingam Deemed University. Cheren Region Christian Society for the Disabled.</td>
<td>67</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>3.</td>
<td>Madurai Indian Association for the Blind.</td>
<td>72</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>4.</td>
<td><strong>ThiruchirapalH</strong> Rehabilitation Centre for Blind Women. Flooly Cross Service Society.</td>
<td>42</td>
<td>21</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>242</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

respondents. For selection of the units of the study, a probability sampling procedure of complex systematic random sampling method was followed.
4.9 TOOLS AND TECHNIQUES USED

The tools used for this study are four-fold. The first is an interview schedule, consisting of 27 items for collection of data on demographic and disability details. The second is the Nottingham Adjustment Scale, consisting of 55 items under seven dimensions used for measuring the adjustment level of the respondents. This instrument has been exclusively developed for the measurement of the adjustment of the visually impaired by Allen G. Dodds (1991) of Nottingham University, United Kingdom. This well field-tested instrument has universal application and is the only instrument exclusively developed for measuring the level of adjustment of the visually impaired and addressed to rehabilitation professionals. This instrument was circulated to five experts in the rehabilitation field and their opinion sought for judging its validity. All of them stated that it is suitable for our conditions and culture.

Subscription to Gandhian values was studied through an instrument containing 39 statements on 19 values, exclusively developed for this purpose. Its content validity was judged by a group of eight experts to whom the instrument was sent and their opinion sought. The reliability of the instrument was established through item wise reliability analysis. The alpha coefficient being 0.7745, the instrument was found to be highly reliable. The fourth and the last is an interview guide with seven areas for studying the respondents’
opinion on the practicability and suitability of Gandhian values in the present day context.

4.10 PILOT STUDY

A pilot study was taken up through visits to the institutions serving visually impaired persons in these four towns in Tamil Nadu. Discussions were held with the heads of organizations and their permission was sought in writing for conducting the study in their institutions. The researcher’s long standing experience in this field and his official rapport with these organizations made this work easy. During these visits informal discussions were held with the visually impaired youth for assessing their interest and knowledge level. These visits were made in the months of May and June 2003.

4.11 PRE-TESTING

Once the tools were selected they were all made in two languages, i.e., English and Tamil. They were pre-tested on a group of 20 respondents and slight amendments were made, except in the Nottingham Adjustment Scale, before finalization.

4.12 COLLECTION OF DATA

Collection of data was made through personal interviews after establishing initial rapport with the respondents in these
institutions. To each and every respondent, the purpose of the interview was explained and they were given assurances of utilization of the data only for academic purpose and confidentiality of the information shared. It was ascertained whether they were seated properly and felt comfortable while interviewing. As all the respondents were visually impaired, each and every item had to be orally read to them and their responses recorded. In assessing their subscription to Gandhian values, detailed explanations were given on each item for their clear understanding before eliciting responses from them. In the initial stages each interview took more than two hours and, later, the time decreased to one hour per interview. On an average, per day, only six to seven respondents could be covered. Thus the collection of data was spread over a total duration of eight months from July 2003 to February 2004.

4.13 STATISTICAL ANALYSIS

For the purpose of statistical analysis of data for arriving at logical inferences, a few select statistical methods were used. These analysis were made using SPSS package and the data are presented in table form. Mean as a central tendency has been used widely. Student t test and Analysis of Variance (ANOVA) were used for observing the differences between groups. Pearson’s Product
Moment Correlation and Multiple Regressions were used for studying the relationship between groups and variables.

4.14 CHAPTERISATIQN

This thesis has a total of nine chapters. The first chapter is introductory, wherein values—meaning and definition—value orientation among the youth, importance of Gandhian values, visually impaired persons in society and significance of the study are explained. The second chapter contains the literature review, which includes reviews from books, journals and the Internet on the subjects of adjustment to visual impairment and Gandhian values. Chapter three explains certain background information on visual impairment and Gandhian values, which includes materials on, meaning and classification, psycho-social implications, causes of visual impairment, magnitude of the problem in India, Gandhian valises and value crisis and value orientation. Chapter four furnishes the methodology, wherein details are presented on the research problem, objectives, variables of the study, hypotheses, area of study, research design, sampling, tools and techniques used, data collection and analysis, chapterisation, operational definitions and limitations of the study. In Chapter five, analysis and interpretation on the empirical data on demographic characteristics of the respondents and disability details are presented. Chapter six
deals with adjustment problems and differences in adjustment between various groups of respondents. Chapter seven deals with subscription to Gandhian values, differences between groups and its relationship to the level of adjustment of the respondents. Chapter eight highlights the opinion of the respondents on the practicability and suitability of Gandhian values to the present day conditions. Chapter nine presents the major findings, conclusions and recommendations. This is followed by a bibliography. In the appendices, the tools used are presented, both in English and Tamil. A module of training is proposed for addressing the adjustment needs and inculcation of Gandhian values among visually impaired youth.

4. 15 OPERATIONAL DEFINITIONS

The following are the definitions of the technical terms used in this report.

Adjustment: Adjustment would mean low level of anxiety, absence of depression, high self-esteem, high sense of self-efficacy, high sense of responsibility for recovery, a positive attitude towards visually impaired persons and a high acceptance of one’s own visual disability.

Level of adjustment: Level of adjustment as measured through administration of the Nottingham Adjustment Scale (1991).
Gandhian values: The principles Mahatma Gandhi advocated and followed, his contributions, the ashram vows and his other practices.

Subscription to values: Subscription to a set of values would mean that a person accepts them in mind, has faith in them and has interest to adopt them in life.

Visual Impairment:

a. Total Absence of sight;

b. Visual acuity not exceeding 6/60 or 20/200 (Snellen) in the better eye with correcting lenses; and

c. Limitation of the field of vision subtending an angle of 20 degrees or worse.

Total visual impairment: Vision loss in both eyes to the extent of no perception of light.

Loss in visual acuity: Loss in clarity of vision measured less than 6/60 in the Snellen chart even after best corrections.

Loss in the field of vision: Loss in the field of vision beyond 20 degrees measured in the Goldman’s scale even after best corrections.
Impairment, Disability and Handicap:

The World Health Organization issued the International Classification of the terms Impairment, Disability and Handicap in the Resolutions 29 and 35 in the World Health Assembly held in 1980, as detailed hereunder.

Impairment: Any loss or abnormality of a psychological or anatomical structure or function. Impairments are disturbances at the level of the organ.

Disability: Any restriction or inability (resulting from an impairment) to perform an activity in the manner or within the range considered normal for a human being. This describes a functional limitation or activity restriction caused by impairment. Disabilities are descriptions of disturbances at the functional level of the person.

Handicap: Any disadvantage for a given individual, resulting from impairment or a disability that limits or prevents the fulfilment of a role that is normal for that individual.

Congenital vision loss: Loss of vision either by birth or before the age of 4 years.

Adventitious vision loss: Acquired visual impairment after having seen for some years. This vision loss may be either degenerative or traumatic.
Duration of Disability: The number of years a person is disabled from the time he acquired visual impairment as per the parameters set to certify a person as per the accepted definition of visual disability.

Educated Visually impaired person: One who is visually impaired within the definition and has completed a minimum of 10th standard through the regular academic stream either in a special school or an integrated set-up.

Youth: A young person, either male or female, in the age group of 13 to 35 years, as defined by the National Youth Policy of Govt. of India (2003)

Independent Living Skills: Set of skills taught to persons with visual impairment by a trained instructor on orientation (ability to locate oneself in the environment) and mobility (ability to move from one place to another), daily living skills, which are ordinarily used for performing various every day tasks relating to personal hygiene, eating etiquette, dressing, making bed, washing, ironing, handling money etc.
Home management skills: Set of skills taught by a trained instructor to visually impaired persons to attend to household and kitchen activities.

White cane: Light weight cane made of metal or wood, either long or foldable, used for mobility by visually impaired persons.

Braille: Script of embossed dots used for reading and writing by visually impaired persons.

Sighted guide technique: A group of techniques used for guiding visually impaired persons by sighted persons.

4.16 LIMITATIONS OF THE STUDY

This study covered only respondents from Tamil Nadu and particularly from four major towns where the concentration of educated visually impaired persons was adequate. As such it did not include those who live in rural and non-institutional settings. Secondly, this study is confined to only educated visually impaired persons (10\textsuperscript{th} std. and above) and those with lesser/no education are not included. Further, the respondents are strictly selected based on imposed age restrictions, i.e., 13 to 35 years.