Chapter Four
METHODOLOGY

4.1 Title

A STUDY ON THE PERCEIVED PHYSICAL ENVIRONMENT, SOCIAL ENVIRONMENT AND CHANGING VALUES OF YOUNGER GENERATION OF A GROUP OF ELDERLY PEOPLE LIVING IN OLD-AGE HOME AND IN FAMILY SETTING OF KOLKATA CITY.

4.2 Objectives of the present investigation

The ageing of a population is an obvious consequence of the process of demographic transition. The developed regions of the world have experienced its consequences and the developing world is well on its way to facing a similar scene. Though the proportion of the elderly persons (defined in terms of those aged 60 and above in a population) seems to be low in some of the developing countries, they have more elderly persons in absolute terms because of their large population base. A recent emphasis on studies pertaining to the elderly in the developing world is due to their increasing numbers and deteriorating conditions. When their increasing number is attributed to demographic transition, their deteriorating condition is considered as the end result of the fast eroding traditional family system in the wake of rapid modernisation and urbanisation. In a healthy society there will be ways of making sure that all age groups have access to the attributes of healthy ageing: social integration, autonomy and adequate income, diet and housing. Life in institutions need not be bad, but it commonly is. This holds every where in the world.
People go into institutions for various reasons. Whatever may be
the setting (family or old-age home), safety and convenience,
choice and control and physical conditions are important
consideration (Smith, 1991). A great deal of research has found
that when social environment fosters perceived choice and
personal control, the well-being of elderly is enhanced (Rodin,
1986; Rohr and Khan, 1987; Woodworth and Wallston, 1987). On
the other hand attachment is highly relevant to psychological
experience in later-life (Bradley and Thomas, 2001). It means
higher levels of sense of community, friends, activity, impact of
neighbour including dwelling unit and dwelling environment
which are important for residential satisfaction for elderly
(Kahana et al., 2003; Pretty et al., 2003). Besides this, a great deal
of research has found that health care, family and state support,
self-esteem are related to perception of happiness, sense of well-
being among the aged people (Pei and Pillai, 1999). As a key
mechanism, regulation of social relationship reflect in social,
emotional and also cognitive ageing (Lang, 2001).

Thus the aim of the present study is to know the existing
physical environment, social environment and changing values of
younger generation as perceived by a group of elderly persons
residing in different old-age homes and family settings of Kolkata
city. This study is a comparative one as well as an exploratory in
nature. It is indeed, a colossal task for an individual researcher to
identify all such factors as perceived specially by the elderly by
an individual researcher through studying some selected families
and old-age homes of a specific district viz., Kolkata district in
West Bengal but it may be considered as the initiation of such a probe and/or may function as a part of a comprehensive well exhaustive future investigation. However, considering the limited resources and opportunities (as these are quite obvious in most of the time-bound dissertation works) the present investigation had the following aims and objectives:

(1) To study the physical environment as perceived by the elderly residing in different old-age homes and family settings of Kolkata City.

(2) To study the social environment as perceived by the elderly residing in different old-age homes and family settings of Kolkata City.

(3) To study the changing values of younger generation as perceived by the elderly residing in different old-age homes and family settings of Kolkata City.

(4) To study whether duration of stay have any significant role on the elderly residing in different old-age homes and in family settings of Kolkata City in terms of their perceived physical environment, social environment and changing values of younger generation.

4.3 Concept and operationalisation

4.3.1 Old-age

It is the closing period of the life span. It can be socially defined as a time of fulfilment or a time of marginalisation. It is a period
when people sieve away from the previous. It is the period of decline. The phenomenon of the old-age being conceived in terms of chronological measurement. The ageing of a population is an obvious consequence of the process of demographic transition. In a globalising world, the meaning of old-age is changing across culture and within countries and families. The position of the elderly person in a society is a measuring rod of the civilisation because with advancing age, most people suffer from increasing social loss or social disengagement.

4.3.2 Home environment and family environment

The home environment primarily for those elderly persons who are unable to stay with his/her own family members with one or many reasons. It is an alternative shelter of the house where elderly persons can share their feelings, likings and dislikings, experiences with each other staying at this type of settlement. They live in an institutional set-up following some rules and regulations.

The family may be defined as a social grouping, the members of which are united by bonds of kinship. Nuclear family consists of two mature adults of opposite sex who live in a union (marriage) recognised by other members of their society, their father/father-in-law and mother/mother-in-law and their children. These ties vary from one society to another society (Lowie, 1948). The pattern of the family life established in early adulthood, starts to change with the onset of middle age. These changes are made more pronounced by retirement, with the
accompanying reduced income or by the death of a spouse in old-age.

Family environment, takes an important role upon elderly people. Family is a subsystem of society which is perceived to be most relevant to mental health and mental health problems of its members. Functions of the family are geared facilitating the promotion and preservation of health in general and mental health in particular. Hence, different aspects of family climate are etiologically relevant: (a) unhealthy interpersonal interaction in the family leading to dissatisfaction of physiological, emotional, security and social needs; (b) pathological and disturbing communication patterns and lack of support by the family members and cohesiveness in the family. Due to this, the elderly people feel alone, lack of social identity and they select old-age home according to their own choice. On the other hand, they are sometimes forced to go to old-age home.

4.3.3 Perceived physical environment

Life and environment are correlates. Their relationships are extremely intimate and reciprocal. Environmental differences generate variations and living styles of the concerned dwellers. Physical settings usually have a primary purpose and it is the purpose that determines their design and sensory characteristics, the objects and facilities they require and the kinds of individuals and related activities that will be found in them. It mainly refers the build-up environment of human population in connection with
living arrangement, infrastructural facilities, communicational facilities, medical facilities, recreational facilities, etc.

4.3.4 Perceived social environment

Permanent dwellers of a locality generally live together in such a way that they share the basic conditions of a community life, and develop a strong positive self-identity. High place-identity or attachment helps to develop in them strong belongingness, unanimity and a subculture. They are influenced by common sentiments, felt-needs and perceived problem for survival. They sometime ignore undesirable conditions related to certain social indicators and underestimate growing rate of social problems. It may be assumed that high place attachment of community members contribute to generate common perceived characteristics regarding the social environment of the concerned locality.

4.3.5 Perceived changing values of younger generation

Value is a term frequently used in social psychology, and is of relevance in understanding social behaviour. Value influences behaviour both social and non-social. They are acquired as a result of learning and experience and provide basic principles, guiding large segments of our behaviour. Infact people tend to develop specific value system which provides a consistent frame of behaviour in most of situations. Values serve an important function in the way one rationalises thoughts and actions that would otherwise be personally and socially unacceptable, so that one's feeling of competent and morality can be unaffected and one's self-esteem maintained or even enhances.
4.4 Hypotheses

**Hypothesis-I**: Physical environment as perceived by the elderly residing in old-age homes of Kolkata city is good and satisfactory in comparison to the elderly residing in family settings of Kolkata city.

**Hypothesis-II**: Social environment as perceived by the elderly residing in old-age homes of Kolkata city is more congenial in comparison to the elderly residing in family settings of Kolkata City.

**Hypothesis-III**: Changing values of younger generation is not perceived favourably by the elderly residing in old-age homes of Kolkata City in comparison to the elderly residing in family settings of Kolkata City.

**Hypothesis-IV**: Physical environment as perceived by the elderly residing in old-age homes of Kolkata city whose duration of stay is above five years is better in comparison to those whose duration of stay is below five years.

**Hypothesis-V**: Physical environment as perceived by the elderly residing in family settings of Kolkata city whose duration of stay is above five years is better in comparison to those whose duration of stay is below five years.

**Hypothesis-VI**: Social environment as perceived by the elderly residing in old-age homes of Kolkata city whose duration of stay is above five years is more congenial in comparison to those whose duration of stay is below five years.
Hypothesis-VII: Social environment as perceived by the elderly residing in family settings of Kolkata city whose duration of stay is above five years is more congenial in comparison to those whose duration of stay is below five years.

Hypothesis-VIII: Changing values of younger generation has been perceived as unacceptable to the elderly residing in old-age homes of Kolkata city whose duration of stay is above five years in comparison to those elderly whose duration of stay is below five years.

Hypothesis-IX: Changing values of younger generation has been perceived as unacceptable to the elderly residing in family settings of Kolkata city whose duration of stay is above five years in comparison to those elderly whose duration of stay is below five years.

Hypothesis-X: Elderly people residing in joint families of Kolkata city perceive the physical environment better than that of those who belong to the nuclear families.

Hypothesis-XI: Elderly people residing in joint families of Kolkata city perceive the social environment more healthy and congenial than that of those who belong to the nuclear families.

Hypothesis-XII: Elderly people residing in joint families of Kolkata city perceive the changing values of younger generation relatively unacceptable than that of those who belong to the nuclear families.
Hypothesis-XIII: Elderly people residing in single rooms of old-age homes perceive the physical environment better in comparison to the elderly residing in dormitory settings.

Hypothesis-XIV: Elderly people residing in single rooms of old-age homes perceive the social environment more congenial in comparison to the elderly residing in dormitory settings.

Hypothesis-XV: Changing values of younger generation is relatively unacceptable to the elderly people residing in single rooms of old-age homes in comparison to the elderly residing in dormitory settings.

Hypothesis-XVI: Elderly people residing in old-age homes and in family settings of Kolkata city whose duration of stay is below five years in the same environment differ among themselves in terms of perceived physical environment, social environment and changing values of younger generation.

Hypothesis-XVII: Elderly people residing in old-age homes and in family settings of Kolkata city whose duration of stay is above five years in the same environment differ among themselves in terms of perceived physical environment, social environment and changing values of younger generation.

4.5 Study area and sample selection

In order to put the above mentioned hypotheses in empirical situation, the present study was conducted in two separate phases: Phase I and Phase II. The Phase-I was done to develop mainly the necessary tools and Phase-II for an adequate understanding
about the physical environment, social environment and changing values of younger generation as perceived by the elderly belonging to old-age homes and family settings of Kolkata city.

4.5.1 Study area

In order to carry out the present investigation, eight old-age homes, viz., Ashaniketan, Navanir – Chetla Branch, Navanir – Tollygunge Branch, All Bengal Women’s Union, Ramkrishna Vivekananda Mission, Nabadiganta, Volananda Giri and Ramkrishna Math were selected for the present investigation. Beside old-age homes, the other activities of those organizations are noteworthy to mention. The short profile of those organizations are as follows:

(A) Ashaniketan

- Family Counselling Centre
- Short Stay Home
- Canteen
- Working Women’s Hostel
- Old-Age Home
- Training Centre

(B) Navanir (Chetla and Tollygunge Branch)

- Relief Work
- Old-Age Home
- Street Children Programme
- Non-Formal, Adult and Vocational Training Centre
- Crèches
- Eradicating Illiteracy
- Legal Aid for Victimised women
- Prevention of Drug abuse
- NORAD Project
- Agra-Bobla Integrated Welfare Centre
- Seminars, Workshops and other activities
All Bengal Women's Union

Home for young adult
Primary school
Old-age Home
Legal services clinic
Counselling Programme
Balwadi Centre for tiny children
Annual functions

Children's Welfare Home
Training and Production Centre
Rehabilitation Project
Seminar/Workshop
Shikshalaya Prokolpa
Sahayika Project

Ramkrishna Vivekananda Mission

Welfare Homes
Homes for the old-age people
Hostel for paying students
Publication department for printing and publishing books of general and religious interest
Agricultural farming

Residential, Educational & Vocational Training & Production Centre
School for general education and non-formal school for development of street children
Medical Services
Relief Work

Volananda Giri

Only the old-age home for old people
Primarily two homes – Ashaniketan and Navanir (Chetla Branch) were selected for the development of tools for study Phase-I. At first, a list of old-age homes of different areas of Kolkata city was prepared with the help of West Bengal Social Welfare Advisory Board, Department of Social Welfare, Government of West Bengal and also from Help Age India. From the list, eight old-age homes were selected following the stratified
Figure A: Diagram showing the selected study areas of Kolkata city
random sampling technique, i.e., two from East, two from West, two from North and two from South Zones of Kolkata City. On the other hand different families of Kolkata city which are located near to the selected old-age homes were also considered in this investigation.

4.5.2 Sample Selection

In the first phase, to develop the tools for the present investigation, a group of 200 elderly (100 from old-age homes and 100 from family settings) from Kolkata city were selected. The concerned elderly people are all (a) above 60 years of age, (b) education at least primary level, i.e., Grade-IV and (c) duration of stay is below and above five years in the same environment. After the development of tools by applying adequate statistical treatment on the quantified responses of data, in the second phase, a group of another 400 elderly persons (200 from old-age homes and 200 from family settings) were equiproportionally selected from the above mentioned criteria of Phase-I study.

4.6 Tools Used

(i) General Information Schedule

It contains items like name, address, age, sex, education, marital status, family type, duration of stay, physical problems, mental problems, reasons for satisfaction and dissatisfaction in their present environment.
(ii) **Perceived Physical Environment Questionnaire**

It consists of 46 statistically significant items answerable along 5-point scale from strongly agree to strongly disagree where high score indicates positive or favourable attitude towards the physical environment as perceived by the elderly people. It covers the infrastructural facilities, communicational facilities, recreational facilities, medical facilities and existing physical condition of the house and the surrounding environment. Odd-even split-half reliability is 0.80 and the value of Cronbach alpha is 0.78.

(iii) **Perceived Social Environment Questionnaire**

It consists of 25 statistically significant items covering the basic conditions of a community life, social interaction pattern with the friends and neighbours and the social relationship as perceived by the elderly people in and around the living environment answerable along 5-point scale from strongly agree to strongly disagree. High score indicates positive or favourable attitude toward the social environment as perceived by the elderly people. Odd-even split-half reliability is 0.78 and the value of Cronbach alpha is 0.81.

(iv) **Perceived Changing Values of Younger Generation Questionnaire**

It consists of 25 statistically significant items answerable along 5-point scale from strongly agree to strongly disagree where high score indicates positive acceptance of the changing values of
younger generation as perceived by the elderly people. Here the term value has been used variously to refer to interest, pleasures, likes, preferences, duties, moral obligations, desires, wants, goals, needs, aversion and attraction and many other kinds of selective orientation. Odd-even split-half reliability is 0.79 and the value of Cronbach alpha is 0.80. Development of the tools have been presented under Results and Interpretation, Phase-I in Chapter-V.

4.7 Administration of Tools and Collection of Data

Phase-I and Phase II

In consultation with the selected elderly persons belonging to old-age home and family environment of Kolkata city, a tentative programme schedule was developed for fixing up the probable dates and time of the test sessions. Following the said schedule, each elderly person was attended by the present investigator to collect data from selected the subjects. It was observed that the average time of approximately 2 hours 30 minutes was taken to complete one data with a minimum time of 2 hours to a maximum time of 3 hours.

Such a programme schedule enabled the present investigator to develop the tools and also finally for collecting data from 100 males and 100 females from different old-age homes and another 100 males and 100 females of elderly from family settings near to the old-age homes of Kolkata city.

Besides administration of the above tests, the brief descriptions about the old-age homes and about the family
settings and also the background information of the selected elderly persons were recorded.

4.8 Scrutiny of Data

The responses of the data given by the elderly persons were carefully scrutinised on the spot by the present investigator just after each test session, to avoid any omission of the objects by the subject concerned. In case of such omission the concerned subject was again requested to fill in the same.

4.9 Scoring and Tabulation

Scoring and tabulation were done separately for each category of elderly persons belonging to different old-age homes and family settings of Kolkata City.

As the General Information Schedule involves mainly qualitative data, the frequencies of each type of responses were determined after tabulating all the responses of the elderly persons belonging to different old-age homes and family settings of Kolkata city. Thus two sets of categorical data one – elderly persons belonging to old-age homes and the other – elderly persons belonging to family settings of Kolkata City were obtained for statistical treatment.

In case of other three tools, such as (i) Perceived Physical Environment Questionnaire; (ii) Perceived Social Environment Questionnaire and (iii) Perceived Changing Values of Younger Generation Questionnaire, the respective scoring keys were used
to score the data. Tabulation was done separately for each questionnaire and also for two categories of data, viz., elderly persons belonging to old-age homes and nearby family settings of Kolkata city.

4.10 Statistical Analysis of Data

Study Phase-I: For the development of tools, item analysis was done for each item of each questionnaire – (i) Perceived Physical Environment Questionnaire; (ii) Perceived Social Environment Questionnaire; and (iii) Perceived Changing Values of Younger Generation Questionnaire. Reliability coefficients of all the questionnaires have been calculated using Odd-Even Split-Half method and then by applying Spearman-Brown Formula for the double length and also by Cronbach Alpha Test.

The detail procedure for the development of the tools along with adequate statistical treatment have been presented under Results and Interpretation, Phase I.

Study Phase-II: The tabulated scores were classified either in qualitative categories (for the General Information Schedule Data) or in quantitative groups (for the other test data) for further statistical analysis.

4.10.1 General Information Schedule of the Elderly Persons

In order to depict the typical picture of the general information of the elderly persons belonging to old-age homes and family settings of Kolkata city in terms of age, sex, education, marital status, family type, duration of stay, causes of satisfaction and
dissatisfaction about the living environment, types of physical and mental diseases etc. descriptive statistics like mode value and percentages were calculated separately. Relevant comparisons were made by applying Chi-square test.

4.10.2 Perceived Physical Environment
Scores of this scale were summated separately for all elderly persons belonging to old-age homes and family settings of Kolkata city and their arithmetic means and standard deviations were calculated. Then 't'-test was applied to compare the data of two categories of environmental settings – considering male, female and combined data separately. Besides this, t-test was also applied to make gender difference in connection with perceived physical environment in both old-age homes and family settings.

4.10.3 Perceived Social Environment
Like the Perceived Physical Environment Questionnaire, scores of the perceived social environment by the elderly were considered to calculate the means and the standard deviations separately for old-age homes and family settings of Kolkata city. Then t-test was applied to make a statistical comparison between the groups taking male, female and combined data, separately. Here also t-test was applied for understanding the gender difference in connection with perceived social environment in two different study areas.
4.10.4 Perceived changing values of younger generation

Arithmetic means and standard deviations were calculated separately for the old-age homes and nearby family settings of Kolkata city in terms of perceived changing values of younger generation. Comparison was made by applying t-test for male, female and combined group separately. In addition, gender differences in connection with perceived changing values of younger generation were also evaluated by applying t-test for both old-age homes and nearby family settings of Kolkata city.

In addition to the above mentioned statistical analysis of data, a few significant figures have been drawn to make a comparative evaluation as readily intelligible and more conspicuous. Such figures include pie chart and bar diagram.