Chapter III

RESEARCH METHODOLOGY

CHAPTER III

Research Methodology

Research Design

The present study is exploratory and descriptive in nature. The broad aim of the study is to explore the nature and the kind of living arrangements of the elderly and describe its relationship to the quality of life of the elderly living in such arrangements. Thus, the study helps us to understand the extent to which the current living arrangements impact the quality of life of the elderly within the context of their socio demographic characteristics. The study also makes an effort to map the reasons given/perceptions of the elderly regarding their preferential living arrangements in the light of their quality of the life in their current living arrangements. A combination of quantitative and qualitative methodologies was used in the study. Keeping in view of the nature of problem under study, a triangulated approach[1] was adopted to study the phenomenon. Triangulation is the use of two or more different methods in studying the same phenomenon as the use of multi method approach would give more conclusive assessment of the phenomenon. Later, the information obtained by these methods of data collection is collated so as to increase the reliability of the explanation arrived at regarding the issue under study (Denzin, 1970; Kelle & Erzberger, 2004).

In the present study, a household survey of sample respondents in the Vadodara (Urban) Municipal Corporation (VMC) limits was taken up using an interview schedule, as part of the quantitative approach and as part of qualitative approach the case study and observation methods were used. In addition, secondary data such as census reports, the Vadodara district handbook other government reports and the VMC web site were consulted to ascertain the information about the elderly and their living arrangements in the state, the district and in the city.

[1] Triangulation or use of multiple methods is a plan of action that will raise social research above the personalistic biases that stem from use of single methodologies. By combining methods in the same study, observers can partially overcome the deficiencies that can flow from one method.... In this respect triangulation of method, investigator, theory and data remains the soundest strategy of theory construction (Denzin, 1970:300).

Aim of the Study

The aim of the study is to understand and describe the current living arrangements (CLAs) of the elderly and to explore their influence on the domains of Quality of Life (QoL) such as physical health, social relationships, psychological and environment and on the variables closely related to QoL such as Loneliness and Adaptation to Old Age (AOA). The study also made an attempt to explore the association of mediating variables like the socio demographic characteristics with the CLAs and the QoL, Loneliness and AOA of the elderly. In addition, the association of the aspects in the context of the current living arrangements such as financial security, living environment, family relations and interaction with family members, social interaction, leisure activities and daily routine, life preparatory measures etc., with the socio-demographic variables, the CLAs, and the QoL, Loneliness and AOA of the elderly.

The specific objectives of the study are:

1. To explore and describe the current living arrangements among the sample elderly.
2. To assess the relationship between the current living arrangements and the domains of quality of life of the sample elderly.
3. To study the association between current living arrangements and quality of life, and with loneliness and adaptation to old age that are closely related to QoL, mediated by the socio-demographic variables of the sample elderly.
4. To identify implications of the study in terms of advocacy and policy level change and the scope for social work practice with the elderly in this area.
5. To make suitable suggestions, based on the findings of the study, for improving the living arrangements and quality of life of the elderly.

The study addressed the following research questions:

1. How do the type of living arrangements (mediated by the socio-demographic characteristics) impact on the domains of quality of life of the sample elderly?
2. What are the perceptions of the sample elderly based on the reasons given by them for their stay in current LA and for the choice of preferential living arrangement?

Operational Definitions

The following terms were used in the study as per the definitions given below.

Older person. One who has attained the age of 60 years or above at least 6 months prior to the date of the study.

Living arrangements. Living arrangements in relation to older population refers to two aspects i.e. the type of residence, whether institutional or private dwelling, and the household composition, which comprises of the presence or absence of others and the kin relationship among the coresiding individuals (Wolf, 1994). Keeping this in view, the definition given by Rajan & Kumar (2003) was considered for the study. According to them, living arrangement is the type of household/family setting in which the elderly live, the headship they enjoy, the place they stay in and the people they stay with, the kind of relationship they maintain with their kith and kin, and on the whole, the extent to which they adjust to the changing environment. After careful reading of the literature, the following scheme of classification of the types of living arrangements of the elderly was identified to be adapted for the study. This classification was suggested by Shanas et al., (1968) and modified by Palmore (1975).

a) Coresidence with children: The household is comprised of the elderly person or couple who are living along with son (s) or daughter (s) (married or unmarried)
b) Living with spouse only: The household is comprised of the elderly married couple.
c) Living alone: The household is comprised of the elderly person who is staying alone.
d) Living with relatives: The household is comprised of the elderly person living along with siblings/grandchild (ren) or other relatives of the family (paternal/ maternal).
e) Living with assistance: The household comprises of the elderly person living with the assistance of a full-time hired person who takes care of household maintenance, physical support, nutrition, health needs and personal care of the elderly person.

Current living arrangement. The living arrangement in which the elderly person has been living for 2 or more years.

Preferential/preferred living arrangement. This denotes the preference to a particular living arrangement mentioned by the elderly respondent, if given a chance to choose among the LAs, in a hypothetical sense. Here preference is defined as the real or imagined choice among the alternatives based on considerations of happiness, satisfaction, gratification, enjoyment and utility they provide (Sen, 1982).

Type of family

a) Nuclear family: A married couple living without children or with unmarried children (who are under 18 years of age), and without any other extended relatives living in the household with them.
b) Joint family: Two or more generations of members (for e.g. parents and their married sons) who are adult coparceners living together under one roof and sharing food from a common kitchen.
c) Extended family: A married couple staying with unmarried sisters, brothers or other extended relatives such as for e.g. unmarried sons/daughters in the household.
d) Living alone: Only the elderly person staying alone.

Work. Work is defined as participation in any economically productive activity with or without compensation or remuneration.

Family income (p.m.) Family income per month (as told by the respondent) is the combined income of all individual earners in the family including the elderly respondent. In the case of the elderly couple, only the income mentioned by the husband (and validated by the wife) was taken as family income and care was taken to include wife's earnings as well.

Respondents' income (p.m.) Respondents' monthly earnings if any, from work, job pension, old age pension (if applicable) and income from assets such as land, house, savings etc., and other sources. If the respondent reported 'no income', it was recorded as such. In such cases the elderly are dependent on family members with whom they stay for monetary and other forms of assistance or resort to begging to obtain money or food.

Head of the household. The head of household for the study purposes is defined as a person who is recognized as such by the household. The head of household need not necessarily be the oldest male member or an earning member, but may be a female or a younger member of either sex. She or he is generally the person who bears the chief responsibility of managing the affairs of the household and takes decisions on behalf of the household.

Physical disability. Refers to any impairment either single or multiple (in hearing, vision or movement) that is restricting the normal social functioning of the older person.

Living environment. Refers to the number of rooms in the house, the space used by the respondent for spending time during the day and sleeping at night, and about the availability and the condition of facilities used by the older person in the house.

Interaction with family members. Refers to the information about the respondents' relationship with the hardest and easiest person to get along with in the family and the elderly person's perception of the level of interest of their child (ren) and family members about their well-being.

Social interaction. Refers to the purpose/place and the frequency of visits of the elderly to the neighborhood and farther, and their engagement with friends, visitors and community voluntary work.

Nutrition and access to food. The food habits and routine for food intake of the elderly based on the presence or absence of arrangements in the family for ensuring access to food.

Leisure time and daily routine activities. Leisure activities refers to indoor and outdoor activities that the older person engages himself / herself in during their free time or unobligated time (Murphy, 1981). Whereas, daily routine includes all the activities that are carried out by the elderly person on any typical day from morning to evening till they go to bed, to maintain the household and their life.

Life preparatory measures. The changes in habits, routine, decisions and resolutions taken and followed by the older persons after they attained the age of 60+ years in order to maintain a healthy life in the old age.

Measures Used in the Study

a. Quality of Life. It is the subjective rating of personal well-being and life-satisfaction of the elderly in relation to specific domains such as physical health, social relationships, psychological well-being and environment. A WHOQOL-BREF questionnaire has been used to measure this dimension (WHOQOL Group, 1998b).

b. Loneliness. It is a feeling expressed by a person defining his or her form or level of relationships with others as inadequate (Lopata, 1969, Weiss, 1973). Such feeling is an expression about the presence of relative deprivation, looking at one's own lifestyle, situation, or relationships as socially and emotionally inadequate in comparison to the past or in anticipated future, or in comparison to other people who are assumed to be satisfactorily engaged. The Version 3 of University of California and Los Angeles (UCLA) Loneliness Scale (Russell, 1996) is used to ascertain this state of feeling.

c. Adaptation to old age. Adaptation to old age refers to the evaluation of the older person's adjustment to life along the sub domains of health comparison, self-control, self-efficacy and generativity. The Adaptation to Old Age Questionnaire (Efklides, Kalaitzidou, & Chankin, 2003) is used to measure this.

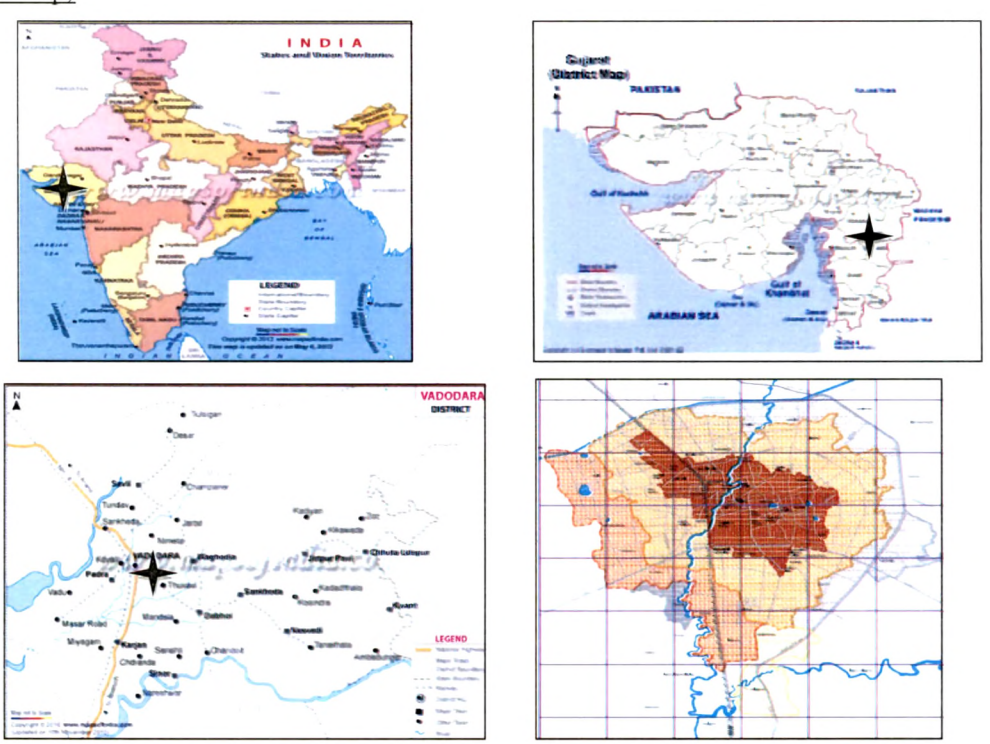
d. Activities of daily living. Refer to a set of common, everyday tasks, which are required for personal self-management, maintenance and independent living such as bathing, eating, dressing, toileting, and transferring (Chadha, Chao, Bhatia, Rohatgi, & Mir, 2006). Katz Independence in activities of daily living Index (Katz, Down & Cash, 1970) is used to measure the level of functioning of the respondent elderly.

A more detailed description of these measures will be given later in this chapter.

Research Setting

The Vadodara (urban) Municipal Corporation (M.corp) area was taken for the purpose of the present study. Vadodara, previously known as Baroda is a cosmopolitan city. It is one of the cities within the Vadodara district, in Gujarat state. The total population of Vadodara city (M. Corp) is 1,306,227 with 6,84, 013 (52.4 per cent) men and 6, 22,214 (47.6per cent) women (Registrar General of India (census), 2011). The population of the aged (60+) in the city is 89,941 (6.9 per cent), comprising 41,822 men and 48,118 women (Registrar General of India (census), 2001). During the period of 1971–2009, the municipal limits of the city have expanded. For administrative purposes, in 1998 the Vadodara city was divided into 4 zones comprising of 13 wards. They are: the east zone wards are 1, 2, 9 and 13, the west zone wards: 6, 10 and 11, the north zone wards: 7 and 8, and the south zone wards are 3, 4, 5 and 12. (Details about the location of the research setting i.e. City, District, and State, and the unique features of the Vadodara city are provided in Appendix VI).

Figure 23: Research setting: India- Gujarat State- Vadodara District- Vadodara City (M. Corp)



Universe of the Study

The universe of the study comprises of all the persons above the age of 60 years residing in the 13 wards in the Vadodara city (Urban) Municipal Corporation.

Criterion for Sampling

The following criteria were kept in mind while selecting the participants.

Inclusion criteria:

a. In the age group of 60 years and above
b. Staying in a household in a family context (for more than 2 years) prior to the date of the study
c. Who can speak Gujarati, Hindi, or English

Exclusion criteria:

a. Elderly living in institutional settings
b. Elderly diagnosed as having mental impairment and illness
c. Elderly having high level of impairment in hearing, sight and speech

Sampling Procedure

A multi-stage sampling method was used to select the sample for the study. A caveat needs to be mentioned here. Though care was taken to avoid investigator bias in selecting the sample for the study by using a random sample, the sample turned out to be purposive in view of the mobility and non-availability of some of the respondents when approached during data collection.

The following steps were taken at each stage to select the sample for study. As indicated, the Vadodara city (M.corp) has four zones- North, South, East and West with 13 administrative wards. The map of the Vadodara city was obtained from the town planning office of the Municipal Corporation of Vadodara. This map with the 13 wards already outlined, was divided into equal sized grids and then the grids were serially numbered. Thus, it resulted in 26 grids. Out of the 26 grids, only 22 grids covered residential areas (see Table 8) and the remaining 4 grids covered the industrial, non-residential areas like G.I.D.C, O.N.G.C, airport, E.M.E defence land and the railway station (see Appendix IV). Therefore, they were excluded from the study.

Table 8: Ward-wise distribution of the residential areas that fall in the grids

Ward number	Residential areas with grid number
1	Mandvi (17)
2	Harni (3)
3	Wadi (18)
4	Manjalpur (20), Tarsali (21)
5	Khanderao market (16), Raj Mahal road (16)
6	Akota (15), Jetalpur (15), Mujmahuda (19)
7	Nizampura(6), Sama (2), Fatehgunj (6), Pratapgunj (11), Behind shastri bridge (11)
8	Raopura (13), Karelibaug (7)
9	Kisenwadi (13)
10	Gorwa (4) , Gotri (9), Subhanpura (5), Ellora park (10), Alkapuri (10)
11	Vasna (14)
12	Makarpura (22)
13	Nava yard (1)

Further, in the 26 areas which have been identified falling in the 22 grids covering the 13 wards (see Table 9) older persons living in the family context were enumerated using the preliminary data sheet. The preliminary data sheet covered details pertaining to basic socio-demographic details of the elderly, information about the convenient time for them to be contacted during the day, and contact address and telephone number. In each of the enumerated area, those elderly (60+ years) who are available and willing to participate in the study were enumerated using the Preliminary Data Sheet. In this manner, a list with a total of 640 elderly was enumerated from all the 26 areas.

Next, keeping the constraints of time and manpower in view, it was decided to select randomly around 40 per cent of the elderly from the list thus generated. Thus the researcher arrived at a sample of 250 respondents. During the data collection, wherever a respondent was not available, the next name in the total list was used to fill up the gap, till 250 elderly were interviewed. While finalizing the filled interview schedules, 7 schedules were found to be incomplete and therefore were discarded thus making 243 elderly as the final sample for study. The final distribution of the sample elderly by the enumerated area is shown in Table 9.

Table 9: Distribution of the sample elderly across the 26 enumerated areas

S. No.	Area	Frequency
1	Harni	1
2	Wadi	4
3	Manjalpur	6
4	Khanderao Market	8
5	Raj Mahal Road	3
6	Akota	12
7	Jetalpur	3
8	Mujmahuda	2
9	Nijampura	21
10	Tarsali	15
11	Kisenwadi	15
12	Sama	22
13	Makarpura	7
14	Fatehgunj	20
15	Mandvi	5
16	Pratapgunj	15
17	Behind Shastri Bridge	3
18	Raopura	3
19	Karelibaug	17
20	Gorwa	7
21	Subhanpura	10
22	Gotri	14
23	Ellora park	13
24	Alkapuri	6
25	Vasna	2
26	Nava yard	9
	Total	243

While selecting the elderly for the case study, care was taken to include respondents on a matching criteria based on sex, age, type of living arrangement and marital status. The respondents were selected from among elderly who were already interviewed for the study. Detailed information was ascertained by conducting further in-depth interview with them, which was used for developing case studies. Event-ordered matrix technique was used to illustrate the impact of certain factors and events in the respondents' life on the LAs and their QoL.

Data Collection Instruments

A. An Interview Schedule was used to collect information from the elderly respondents. The schedule comprised of questions covering socio-demographic and family details, work and economic background, financial security, living arrangements, family relations, interaction with family members, social interaction, nutrition and access to food, leisure time and daily routine activities, preferential living arrangements and life preparatory measures. Measures like WHOQOL-BREF Questionnaire (WHOQOL Group, 1998b), Index of Independence in Activities of Daily Living (Katz, Down, & Cash, 1970), University of California and Los Angeles Loneliness scale (Version 3) (Russell, 1996), and Adaptation to Old age Questionnaire (Efklides, Kalaitzidou, & Chankin, 2003) were incorporated into the interview schedule to collect information on the key variables of the study. Both fixed end and open ended questions were used (see Appendix I for the Interview Schedule used in the study).

The detailed description of the four measures is given here under:

a. Katz Index of Independence in Activities of Daily Living. Katz, Down and Cash developed the index in 1970. The Katz Index of Independence in activities of Daily Living, commonly referred to as Katz ADL, is the most appropriate instrument to assess functional status as a measurement of the elderly's ability to perform activities of daily living independently. The index ranks adequacy of performance in six functions of bathing, dressing, toileting, transferring, continence and feeding.

In the thirty five years since the instrument has been developed, it has been modified and simplified and different approaches to scoring have been used. However, it has consistently demonstrated its utility in evaluating functional status in elderly population. Although no formal reliability and validity reports could be found in the literature, the tool is used extensively as a flag to signal functional capabilities of older adults in clinical and home environments. The detailed scoring instructions are provided in Appendix II.

b. WHOQOL-BREF Questionnaire. The WHOQOL-BREF, one of the generic health related quality of life measurement tools, is a shortened version of the WHOQOL-100 to comply with situations having time restraints, the need to minimise burden on respondents, and where much detail is not needed. India was one of the field-centres included in the development of the WHOQOL-BREF measure. The reliability and validity of the English version of the WHOQOL-BREF was found to be high. As the instrument was developed cross-culturally, WHOQOL assessments were found to be sensitive in cross-cultural settings. The WHOQOL-BREF contains 2 items from the overall quality of life and general health facets, and one item from each of the remaining 24 facets of the WHOQOL-100. These 24 facets are categorised into four domains of quality of life in the WHOQOL-BREF measure, as given in Figure 24.

Thus, the WHOQOL-BREF produces a quality of life profile for a person. The measure provides four domain scores. There are also two items that are examined separately: question 1 asks about individuals' overall perception of quality of life and question 2 asks about an individuals' overall perception of their health. The four domain scores denote an individuals' perception of his/her quality of life in each particular domain. Domain scores are scaled in a positive direction (i.e. higher scores denote higher quality of life on that domain). The Cronbach's α coefficient for the four domains of the measure in the present study are: physical health: 0.81, psychological well-being: 0.78, social relationships: 0.55, and environment: 0.77. The detailed scoring instructions are provided in Appendix II.

Figure 24: The facets that fall under each of the four domains of QoL in the WHOQOL-BREF measure

Domain of QoL	Facets incorporated
1. Physical health	▪ Activities of daily living ▪ Dependence on medicinal substances and medical aids ▪ Energy and fatigue ▪ Mobility ▪ Pain and discomfort ▪ Sleep and rest ▪ Work Capacity
2. Psychological	▪ Bodily image and appearance ▪ Negative feelings ▪ Positive feelings ▪ Self-esteem ▪ Spirituality / Religion / Personal beliefs ▪ Thinking, learning, memory and concentration
3. Social relationships	▪ Personal relationships ▪ Social support ▪ Sexual activity
4. Environment	▪ Financial resources ▪ Freedom, physical safety and security ▪ Health and social care: accessibility and quality ▪ Home environment ▪ Opportunities for acquiring new information and skills ▪ Participation in and opportunities for recreation / leisure activities ▪ Physical environment (pollution / noise / traffic / climate) ▪ Transport

c. UCLA Loneliness Scale (Version 3). The (University of California and Los Angeles) Loneliness Scale was developed to assess subjective feelings of loneliness or social isolation. Items for the original version of the scale were based on statements used by lonely individuals to describe feelings of loneliness (Russell, Peplau, & Ferguson, 1978). The questions were all worded in a negative or 'lonely' direction, with individuals indicating how often they felt that way described on a four point scale that ranged from 'never' to 'often'. Due to concerns about how the negative wording of the items may have affected scores (i.e., response sets), a revised version of the scale was developed and published in 1980 that included 10 items worded in a negative or 'lonely' direction and 10 items worded in a positive or 'non-lonely' direction (Russell, Peplau, & Cutrona, 1980). Since then, the UCLA loneliness scale has clearly become the most widely used measure of loneliness, with over 500 citations of the 1980 publication on the measure in the Social Science Citation Index.

Recently, Version 3 of the UCLA Loneliness Scale has been published (Russell, 1996). It consists of 20 items on a 4 point likert scale (1- Never, 2- Rarely, 3- Sometimes and 4- Always), which is used in the present study. For each question in the list, the respondents have to indicate how often they feel as though the statement applies to them on the 4 point likert scale. In this most recent version of the scale, the wording of the items and the response format has been simplified to facilitate administration of the measure to less educated or frail populations, such as the elderly. Scores on the UCLA loneliness scale have been found to predict a wide variety of mental (i.e., depression) and physical (i.e., immune competence, nursing home admission, mortality) health outcomes in research.

The psychometric properties of the UCLA Loneliness Scale (Version 3) have been evaluated by Russell in 1996, using data from prior studies of college students, nurses, teachers, and the elderly. Analyses of the reliability, validity, and factor structure of this new version were also conducted (Russell, 1996). Results indicated that the measure was highly reliable, both in terms of internal consistency (coefficient α ranging from 0.89 to 0.94) and test-retest reliability over a 1-year period ($r = 0.73$). Convergent validity for the scale was indicated by significant correlations with other measures of loneliness.

Construct validity was supported by significant relations with measures of the adequacy of the individual's interpersonal relationships, and by correlations between loneliness and measures of health and well-being. Confirmatory factor analyses indicated that a model incorporating a global bipolar loneliness factor along with two method factor reflecting direction of item wording provided a very good fit to the data across samples. The reliability coefficient (Cronbach's α) for the UCLA loneliness scale (Version 3) in the present study is 0.87. The detailed scoring instructions for the scale are provided in Appendix II.

d. Adaptation to Old age Questionnaire (AOAQ). Efklides, Kalaitzidou, and Chankin (2003) developed and used the Adaptation to Old age Questionnaire. It is a 20 item, 4 point likert scale (1- I do not agree at all, 2- I agree a little, 3- I agree quite a lot, 4- I fully agree) and includes items related to the ways in which the elderly respondent responds to his/her prominent concerns and interests namely concerns about health, social connectedness, generativity towards children and grandchildren, self-control, and self-efficacy.

Efklides, Kalaitzidou, and Chankin (2003) used exploratory factor analysis and found that AOAQ consisted of four factors which explained 45.6per cent of the total variance of the measured phenomenon. These are identified as the four sub-domains of the adaptation to old age (AOA). The reliability coefficients (Cronbach's α) reported (Efklides et al, 2003) for the respective sub-domains of the scale are: Health comparison- 0.79, General Adaptation/ Self-Efficacy- 0.75, Self-Control- 0.63 and Generativity- 0.58. In the present study, the Cronbach's α for the total measure is 0.83. The reliability coefficients (Cronbach's α) for each of the sub-domains are: Health comparison- 0.46, General Adaptation/ Self-Efficacy- 0.60, Self-Control- 0.68 and Generativity- 0.71. Detailed scoring instructions for the measure are provided in Appendix II.

Standardisation of the translated tools. The three measures i.e. WHOQOL- BREF questionnaire, UCLA Loneliness Scale (Version 3) and the Adaptation to Old Age Questionnaire have been translated into Gujarati language (by an expert from Department of Gujarati, The M.S University of Baroda) and was pre-tested with 15 Guajarati speaking respondents during the pilot study. On the basis of their feedback necessary changes in the language were made to the measures. Other items of the interview schedule which were mostly ascertaining factual details about the socio-demographic data are simpler and can be asked using basic words and sentences in the Gujarati language without much difficulty. Hence, they did not require translation. All information and verbatim for open ended questions in the interview schedule was recorded in the English language.

Pre-testing of the Interview Schedule. Before finalizing the interview schedule, a pilot study was carried out to pre-test the interview schedule, with 15 respondents who were selected from the pool of the elderly generated during enumeration using the Preliminary Data Sheet. Respondents for the pilot study were selected taking into consideration the variables such as sex, type of living arrangement and economic status.

Necessary modifications were made and the final interview schedule was prepared based on the feedback from the pre-test. A few words in the questions of adaptation to old age questionnaire and the loneliness scale were modified by replacing with simpler phrases to enable the elderly to understand the meaning easily, taking care that the implicit meaning is not lost. Similarly, based on the observations made by the respondents, the sequence of the sections in the schedule was rearranged to create a better flow during its administration. Further, certain questions were included such as information about the number of rooms in the household and whether there is report of abuse and neglect etc. Under the sources of respondents' income, 1-2 additional items were added and items that seemed similar were clubbed together.

B. A Checklist of questions was used to interview respondents for the case studies. A brief checklist of questions and probes was prepared to gain an in-depth understanding of the life situation of the elderly, the changes and shifts that occurred in the living arrangements of the elderly respondent in the past 3 decades, and the relationship of different dimensions of his/her current living arrangement with the quality of life of the respondent. Questions also asked about the aspects in the current living arrangement which make him/her happy or the opposite, what changes if made during the next decade from now in the current living arrangement can make their lives better, and whether they foresee any changes in their living arrangement (see Appendix V for the checklist of questions used for the in-depth interview).

Data Collection

The data collection took 9 months i.e. from November 2010 to July 2011. On an average it took one hour to one and a half hour to administer the interview schedule (Median: 1 hour). The interviews for the case studies were done simultaneously on prior appointment with the respondents. For the in-depth interview for the case studies, the researcher spent around 2-3 hours per visit.

Ethical Considerations. The researcher carried a formal letter signed by the research guide and the Dean, Faculty of Social Work stating that the researcher is pursuing the PhD degree at the Faculty of Social Work and that the findings of the study would be used for educational purposes only. The letter assured full confidentiality, and that the researcher would make one visit to spend an hour for the interview and if needed would make another visit of one hour for the in-depth interview for the case study. The respondents were informed that the participation in the study was voluntary and that they could ask the researcher to stop the interview at any point of time and express their unwillingness to continue the interview, without giving any explanation. This ensured that the elderly were informed of the purpose of the visit and their verbal consent was taken before proceeding to administer the interview schedule.

Data Management

The interview schedules filled during a field visit were checked by the researcher daily after returning from the field. In case some data was missing, the researcher made another visit to the respondent to fill in the missing data. This ensured that the interview schedules were complete and also decreased the number of schedules that were to be discarded at the end. Despite these precautions, seven schedules had to be discarded due to incomplete information.

Analysis of the Data

The data obtained from open ended questions in the interview schedule were categorized into broad themes and after giving appropriate labels, they were coded under that respective question. A code book was developed for the interview schedule and the codes were entered in the interview schedule across each item. The codes for each schedule were fed into SPSS data file and the data of the 243 respondents was fed into the SPSS programme. After cleaning the data for any errors, relevant statistical methods such as measures of central tendency, cross tabulations, correlation and inferential statistics such as Chi-square, t-test and ANOVA were used to understand relationships between the study variables. Relevant tables, graphs and other data displays as needed were developed from the data. Some qualitative data collected was presented in verbatim form in the case studies and observations were made wherever needed during the discussion and for the suggestions. Nine case studies have been prepared from the qualitative data collected and where applicable the technique of event-ordered matrix was used.

Experiences during Field Work

Most of the elderly who were approached for the interview, on being explained the purpose of the study, have readily agreed to participate in the study. The reasons for the willingness may be because it is for an educational/learning purpose, as it is seen as an opportunity to convey their viewpoints and opinions, and also as they felt that the findings of the study would be useful for others to understand the life of the elderly in this area. Some of the elderly were keen to know the main findings of the study pertaining to the topic. The researcher promised to send them a brief note of the findings. While there was a general willingness, some elderly who had agreed to provide the interview later declined because they did not have time, were not interested, fell ill or were on a tour. Their privacy and decision was respected and the researcher moved on to the next respondent.

The researcher experienced several emotions and feelings due to the myriad observations, situations and contexts that she encountered during field work. These experiences gave the researcher valuable insights. She also maintained a journal of these excerpts from each day's field visit experiences and regularly debriefed with the guide. Some of these observations were used for explaining the results and while writing discussion. Two entries from the researcher's journal are given here as an example.

> "My sons and daughters (five in all) are all settled abroad since 1991. I have supported them as I wanted them to do well in life. Gradually, they wanted us to visit them as they got busy and did not like to visit India, though we have all the facilities for them when they are here. When we visit abroad, we live with the families of our five children turn by turn based on their plans, vacations and as they all wish to have us live with them. Eventually, it became too difficult for us and we are sometimes left with having no say in the matter. Not to complain but we are roped in for care giving for their grandchildren and other tasks full time that drains our energy. My wife clearly told me that she would not want to visit abroad and the children may come if they can. Though my wife and i have green cards we have eventually surrendered them as we could not visit our children abroad any longer as our health did not permit (Cont'd).

Now that I am 89 years old, my children have asked us to wind up our home, settle the property deeds in India and shift our base permanently to stay with them. This is mainly because we have reached advanced age and if we die, all our children need to make arrangements and come here. So if we go there, it will be easier. And if I die earlier than my wife, who is there to look after her in India? She does not trust hired help to assist us even at this advanced age. Even now, my wife is against this decision of going to abroad and says we can manage somehow, but i have convinced her for it". Social support is poor and living arrangement options are few for older people whose children have settled abroad. The longingness they feel for their children in this phase of life that cannot reciprocated by the children in the same measure is conveyed here.

The interview was complete and the researcher was about to take leave. The elderly woman insisted to me *"Beta,* have dinner with me. I am making plain *khichidi.* It is simple and a poor persons' meal, but join me". This woman is 76 years old, neglected and abused by her two sons and working as a domestic help to make her ends meet. I declined gently as I could see that the food she prepared would be barely enough for her dinner that day. It made me wonder how her children did not imbibe from her, these very values of altruism and consideration for others—or was it her craving for human company that prompted her to make that offer?

Be it rain or sun, there was this intrinsic motivation which prompted the researcher to meet and interview the next older person, as there was always something new to experience and learn in each encounter on the field.

Few elderly who have been neglected and abused have asked the researcher for address of old age homes in Vadodara and in such cases, addresses have been provided to them.

The stereotypes and prejudices held about the nature of people, about the elderly and their families were relooked at during the fieldwork which led to positive growth in the researcher.

The hospitality and affection bestowed by the elderly had a humbling effect and increased the positive regard held by the researcher toward the elderly.

Strengths and Limitations of the Study

As explained earlier, though random sampling was used, the sample turned out to be purposive, and hence the findings of this study cannot be generalized. However, as the sample reflects the approximate composition of the population of the city in terms of caste, religion etc., the findings may be useful in developing insights into the nature of the problem in terms of the important variables such as living arrangements, sex, age, marital status and economic background of the elderly respondents.

Not many studies are available examining the relationship between the types of living arrangements and quality of life of the elderly in Gujarat. The detailed manner in which the different aspects relating to the current living arrangements of the elderly, their preferential living arrangements and the impact of living arrangements on the quality of life of the elderly have been studied has brought in valuable insights.

The case studies reveal additional information about a respondent at a personal and in depth level pertaining to the current living arrangements and how it may influence their quality of life, mediated by several factors, in a kind of longitudinal perspective that enriches the quantitative data.

Summary

This chapter outlines the research design based on the nature of the study topic and envisions the aim and specific objectives of the study. Both qualitative and quantitative methods will be used to obtain data. The details about the operational definitions of the concepts and the measures used are provided. The brief description of the research setting of the study as well as the universe of the study sample is defined and proceeds further to the sampling procedure and the steps used to arrive at the study sample. A description of the data collection instruments used in the study was given. The processes of data collection, data management and data analysis are discussed in brief, followed by sharing of the field work experiences of the researcher. The strengths and limitations of the study are duly mentioned.