CHAPTER 3 METHODOLOGY

RESEARCH QUESTIONS

OBJECTIVES

RESEARCH DESIGN

UNIVERSE AND SAMPLING

INSTRUMENTATION

DATA COLLECTION

DATA VALIDATION

CODING AND DATA PROCESSING

DATA ANALYSIS
CHAPTER III- METHODOLOGY

This chapter will highlight the methodology followed for conducting the research on the topic- “Reproductive and Sexual Health Education for Young People- Dynamics of Interaction and Communication”

Three main purposes of research are to describe, explain, and validate findings. Description emerges following creative exploration, and serves to organize the findings in order to fit them with explanations, and then test or validate those explanations (Krathwohl, 1993).

The research design adopted for this study is based on my work on the issue of RSH of young people in rural and urban India. It is also based on the literature review and field work that was done for the same. In this study there is an attempt to understand a phenomenon which has not been reported or documented, i.e. “The Dynamics of Interaction and Communication among young people about RSH”. The research questions to which we are seeking answers are mainly-

**Research questions**

- Is there any “REVERSE COMMUNICATION” between the young women educated in RSH and the non RSH educated married female relatives who have been the traditional sources of this information?
- Does the dispelling of myth occur and right information coming from younger generation is accepted or shunned?
- Does the RSH related knowledge gained by adolescent girls through structured training, have a cascading effect on her married female relatives and her peers?
- Does the RSH education status of the prospective bride or groom, influence marriage decisions?

---

CHAPTER 3 METHODOLOGY

- Are the existing RSH modules well equipped to give the adolescent girls “bargaining skills” within their relationships with their families, in-laws and husbands. This pertains to the change in practice/behaviour related to RSH?
- Will equal stress on RSH training for adolescent boys and young men, improve the overall KAP especially Practice/behaviour among young people?
- How does the RSH training Module and the procedure of conducting training and the trainer profile, affect the KAP of the adolescent girls?

*All these questions and their probable answers are not independent but overlapping and inter-dependent. There are some aspects for which quantitative data may be gathered, like- number of women opting for sterilization, no. of men using condoms etc. But a lot of data is qualitative in nature, like- reasons for not negotiating contraception with husband etc. Thus DESCRIPTIVE RESEARCH design has been chosen to carry out this study.*

**DESCRIPTIVE RESEARCH DESIGN**

Descriptive research does not fit neatly into the definition of either quantitative or qualitative research methodologies, but instead it can utilize elements of both, often within the same study. The term descriptive research refers to the type of research question, design, and data analysis that will be applied to a given topic. Descriptive statistics tell what is, while inferential statistics try to determine cause and effect.

Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). It often uses visual aids such as graphs and charts to aid the reader in understanding the data distribution. When in-depth, narrative descriptions of small numbers of cases are involved, the research uses description as a tool to organize data into patterns that emerge

---

CHAPTER 3 METHODOLOGY

during analysis. Those patterns aid the mind in comprehending a qualitative study and its implications.

Descriptive research is unique in the number of variables employed. Like other types of research, descriptive research can include multiple variables for analysis, yet unlike other methods, it requires only one variable (Borg & Gall, 1989). On the other hand, descriptive research might simply report the percentage summary on a single variable. Descriptive statistics utilize data collection and analysis techniques that yield reports concerning the measures of central tendency, variation, and correlation.

The methods of collecting data for descriptive research can be employed singly or in various combinations, depending on the research questions at hand. Descriptive research often calls upon quasi-experimental research design (Campbell & Stanley, 1963). Some of the common data collection methods applied to questions within the realm of descriptive research includes surveys, interviews, observations, and portfolios.

We can broadly say that-

- Descriptive research allows observation without affecting normal behaviour. Thus it is useful to apply to a research setting where the data collection does not affect the normal behaviour of respondents.
- Useful where it is not possible to test and measure the large number of sample needed for more quantitative types of experimentation. Since the sample size is only 300.
- The main purpose of Descriptive research is to identify variables which might be important. As mentioned above, this study as a whole has a lot of new undocumented elements, thus there is a lot of focus on identifying important variables. For instance, all the documented studies on child health have quoted that “dependent variable- child health is affected by independent variables like mother’s education”. Various hypothesis have also been tested on these lines, thus it is a known fact which can be generalized for the whole population.

88 http://www.aect.org/edtech/ed1/41/41-01.html
CHAPTER 3 METHODOLOGY

The results from a Descriptive Research can in no way be used as a definitive answer or to disapprove a hypothesis. This aspect is most important for this particular study. As the concept of REVERSE COMMUNICATION and PROCESS OF DYNAMICS OF INTERACTION AND COMMUNICATION are being studied for the first time in the context of Structured Reproductive and Sexual Health Education. Through this study we might be able to pin-point the different variables, their correlation to each other. We will not be able to test hypothesis or generalise a finding for the whole population.

There are two types of Descriptive research-1) FIELD SURVEYS 2) OBSERVATIONAL STUDY

For the current study, Field Survey type of research design has been used. Observational design was not possible because the study intends to understand the dynamics of interaction and communication related to reproductive and sexual health. Most of the event we wanted to study, like- ‘discussion of contraception on first night, communication with married female relatives after RSH education etc. these were processes which have been taking place for a number of years after RSH training. Thus actually the data gathered is more of a ‘post-event’ kind of a process than an ‘on going’ one. All these components have been tried to address through various means of data collection- like schedules and FGDs, etc. we will discuss these in detail in the later part of the chapter.

OBJECTIVES:

- To understand the process, content and channel of RSH related communication, between RSH educated young women and her husband, in- laws, married female relatives and peer.
- To understand the pattern of practice and behaviour related to RSH issues among young people trained and not trained in RSH.
- To understand the need for RSH training among adolescent boys and young men and its probable impact on the KAP of young people, especially on Practice/ behaviour.
CHAPTER 3 METHODOLOGY

- To understand the marriage preferences of the young people in rural India in terms of the RSH education status of their prospective partner.
- To arrive at recommendations for RSH training for young people and contribution of Social Work methods and practice skills in RSH training.

UNIVERSE AND SAMPLING

To conduct the Field Survey type study, we need to first ascertain our UNIVERSE and SAMPLE. The study requires data from five different categories of respondents so as to understand the whole process of dynamics of interaction and communication. This gives us a holistic picture of all 5 groups of stake holders -

1. RSH educated young women (10-24yrs)
2. Non RSH educated young women (10-24yrs)
3. Married female relatives of the RSH educated young women (15-45yrs)
4. Female Peer of RSH educated young women- non family member (10-24yrs)
5. Non RSH educated young men (10-24yrs)

UNIVERSE\textsuperscript{89} -

- Total young women (10-24 yr.) in Lunkaransar block: 13604 (approx.).
- Total young men (10-24 yr.) in Lunkaransar block: 15000 (approx.)
- Young women who have received any kind of structured training on RSH issues till 2008: 780.
- Young men who have received any kind of structured training on RSH issues till 2008: 0.
- Total married female relatives (of young women who have attended any structured RSH training): 1600.

\textsuperscript{89} (source of data- Census of India report 2001 and local data available with the NGO URMUL SETU at Loonkaransar Bikaner)
CHAPTER 3  METHODOLOGY

SAMPLING-

Sampling Technique used for Descriptive Research-

It is best to use PROBABILITY SAMPLING (Random or Stratified) but others can also be used like CLUSTER SAMPLING.

In CLUSTER SAMPLING, certain groups are randomly sampled and all subjects in them are observed.

In probability sampling the chances of getting a scattered representation of respondents is very high because it would select respondents from the whole universe, irrespective of the geographical location. The advantage of this method is that it has less scope of biased sampling. But it also has chances of selecting sample from across all 153 villages, which is practically not possible for a single researcher to cover without affecting efficiency and increasing cost exponentially. Thus for this particular study, CLUSTER SAMPLING TECHNIQUE has been used.

CLUSTER SAMPLING

Cluster sampling is a sampling technique in which the entire population of interest is divided into groups, or clusters, and a random sample of these clusters is selected. Each cluster must be mutually exclusive and together the clusters must include the entire population. After clusters are selected, then all units within the clusters are selected. No units from non-selected clusters are included in the sample. This differs from stratified sampling, in which some units are selected from each group. When all the units within a cluster are selected, the technique is referred to as one-stage cluster sampling. If a subset of units is selected randomly from each selected cluster, it is called two-stage cluster sampling. Cluster sampling can also be made in three or more stages: it is then referred to as multistage cluster sampling.
The main reason for using cluster sampling is that it is usually much cheaper and more convenient to sample the population in clusters rather than randomly. In some cases, constructing a sampling frame that identifies every respondent within the cluster is too expensive or impossible.

Cluster sampling can also reduce cost when the population elements are scattered over a wide area. The population may be widely distributed geographically, and then cluster sampling, where the clusters consists of geographical areas, could reduce the number of areas that need to be visited. A smaller number of areas that need to be visited could reduce travel expenses and also make possible more efficient supervision of the fieldwork.

Since the data collection area (study area) is in the THAR DESERT of RAJASTHAN (Loonkaransar, Bikaner), the population density is low at 83.17 persons per Sq. Km. as compared to 20,483 persons per Sq. Km. in Mumbai (census of India 2011). Bikaner has low population density, scattered villages and low population density in villages. The average distance between villages where RSH education programs have been conducted is between 30km to 50km, in some cases the distance between two villages is 80km. Thus for various practical and economic reasons, Cluster sampling technique has been used to reduce travel time and cost and increase efficiency.

Two-stage cluster sampling has been used i.e. selective respondents (all five groups mentioned above) living in the village (cluster) have been taken as sample. Thus out of the total 153 villages, 11 villages were selected as clusters. Due care was taken to divide the clusters in four parts (North, East, West, South) and as far as possible clusters from all were included, so that sample represents the population as much as possible. The respondents were selected within each cluster as per the INCLUSION CRITERIA for each respondent group.
CHAPTER 3 METHODOLOGY

INCLUSION CRITERIA:

A) **RSH educated young women**

- Should be a resident of the 11 villages selected for data collection in the rural area of Lunkaransar block in Bikaner dist. Outside Lunkaransar, if attended the training at Lunkaransar but married out of Loonkaransar.
- Adolescent girls must be of the age group of 10-24 yr.
- Adolescent girl must have attended some kind of structured session on RSH related issues between January 2005 and December 2008.
- Adult trainers, who have received TOT from the same source with same module and methodology, must have conducted the training. This condition will ensure homogeneity among the group in terms of knowledge gained during training.
- A fixed module must have been followed for the training.

B) **NON-RSH educated young women**

- Should be a resident of the 11 selected villages from the rural area of Loonkaransar block in Bikaner dist.
- Must be in the age group of 10-24 yr.
- Must not have attended any structured training on RSH related issues.
- Should not be in direct contact with the RSH educated girl, so that we can rule out the effect of “Peer Education”.
- All the socio-economic and cultural aspects should be similar to that of the RSH educated girls.
- Not more than 8 Non RSH educated girls to be selected from a single village, to rule out data bias arising out of homogeneity.
- 80% of the respondents should be married. This would give us a better idea of dynamics of interaction and communication between the respondents and her husband.

C) **Married Female Relatives (MFR) of RSH educated young women**

- Should be a resident of one of the 11 villages selected in sampling.
CHAPTER 3  METHODOLOGY

- Should be a married female relative of the adolescent girl or young woman selected in the sample.
- The married female relative of adolescent girl should be one who has never attended any structured RSH training.
- Should be residing with the adolescent girl in the same household.
- Should be of the age group of 15-45 yr.
- Not more than 2 married female relatives to be selected from one household.
- Not more than 12 respondents from a single village, so that data bias can be controlled.
- MFR should be currently living with her husband and should not be widow, divorced or deserted. The reason for this criterion is to be able to study the dynamics of interaction and communication with spouse. Thus we need an active marital life to study the dynamics.

D) PEER of RSH educated young women
- Should be in the age group of 10-24 yr.
- Should not have attended any structured RSH education program. This is to limit the RSH related knowledge to RSH educated peer and informal sources.
- Should not have attended any rights based empowerment oriented training. This is to limit the influence of knowledge and attitude building to Kishori Prerna Manch girls.

E) Young Men
- Should be in the age group of 15-24 yr.
- Should be a resident of the 11 selected villages of Loonkaransar.
- Should have never attended any RSH training program. So that we can study the dynamics between RSH educated wife and Non RSH educated husband. This will also help us understand the challenges faced by both the groups.
- Nearly 60% should be married.
CHAPTER 3  METHODOLOGY

METHOD OF FORMING CLUSTERS-

TWO STAGE CLUSTER SAMPLING METHOD

Two stage cluster sampling method was used to form clusters and select respondents from these clusters.

Step 1- Listing of all the villages (clusters) in the study area- 153

Step 2- selecting clusters in such a way so that it represents clusters from all geographic directions to maintain heterogeneity. 11 clusters selected.

Step 3- listing of all respondents of the five respondent groups from the 11 clusters.

The naturally present geographic clusters have been chosen for this sampling. For the purpose of this study, it has been assumed that Clusters are villages, one village is one cluster.

RSH educated young women= 780 approx.
Married Female Relatives (MFR) of RSH educated young women= 1600 approx.
Non-RSH educated young women= 11204 approx.
Peer of RSH educated young women= 2400 approx.
Non-RSH educated Young men= 15000 approx.

Step 4- listing respondents as per the fulfilment of INCLUSION CRITERIA.

RSH educated young women= 500 approx.
Married Female Relatives (MFR) of RSH educated young women= 1200 approx.
Non-RSH educated young women= 8500 approx.
Peer of RSH educated young women= 2000 approx.
Non-RSH educated Young men= 11000 approx.

Step 5- apply SIMPLE RANDOM SAMPLING to select respondents for each group.

RSH educated young women= 75
Married Female Relatives (MFR) of RSH educated young women= 75
CHAPTER 3 METHODOLOGY

Non-RSH educated young women = 50
Peer of RSH educated young women = 50
Non-RSH educated Young men = 50

TOTAL SAMPLE SIZE = 300.

TOTAL SAMPLE SIZE - 300

TABLE: 3.1 SAMPLE DISTRIBUTION BY RESPONDENT CATEGORY

<table>
<thead>
<tr>
<th>RESPONDENT GROUP</th>
<th>AGE GROUP</th>
<th>SAMPLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSH educated young women</td>
<td>(10-24yrs)</td>
<td>75</td>
</tr>
<tr>
<td>Non RSH educated young women</td>
<td>(10-24yrs)</td>
<td>50</td>
</tr>
<tr>
<td>Married female relatives of the RSH educated</td>
<td>(15-45yrs)</td>
<td>75</td>
</tr>
<tr>
<td>young women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Peer of RSH educated young women</td>
<td>(10-24yrs)</td>
<td>50</td>
</tr>
<tr>
<td>Non RSH educated young men</td>
<td>(10-24yrs)</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 300</td>
</tr>
</tbody>
</table>

In the following table we can look at the cluster wise distribution of the sample. There were some clusters where there were substantially higher number of RSH educated girls, MFR and Peer of RSH educated girls. Whereas some clusters had very few respondents in these categories who fulfilled the inclusion criteria. Because of this reason, the sample size across all the clusters is not the same and it differs according to the number of respondents in each cluster and the fulfilment of inclusion criteria.
CHAPTER 3 METHODOLOGY

TABLE: 3.1a

CLUSTER WISE SAMPLE SIZE

The table given below depicts the cluster wise distribution of the total sample for the study.

<table>
<thead>
<tr>
<th>Sl.no</th>
<th>CLUSTER</th>
<th>No. of RSH edu. young women</th>
<th>No. of Non-RSH edu. young women</th>
<th>No. of MFR of RSH edu. young women</th>
<th>No. of Peer of RSH edu. young women</th>
<th>Young Men</th>
<th>TOTAL SAMPLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>NAKODESAR</td>
<td>10</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>2.</td>
<td>RAVASAR</td>
<td>16</td>
<td>5</td>
<td>12</td>
<td>5</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>3.</td>
<td>CHANDSAR</td>
<td>6</td>
<td>7</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>4.</td>
<td>NATHUSAR</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>5.</td>
<td>4 SLD</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>6.</td>
<td>1 SLD</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>7.</td>
<td>MAHADEV VALI</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>8.</td>
<td>507 HEAD</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>9.</td>
<td>BAKHUSAR</td>
<td>14</td>
<td>22</td>
<td>21</td>
<td>5</td>
<td>5</td>
<td>59</td>
</tr>
<tr>
<td>10.</td>
<td>RAMBAGH</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>11.</td>
<td>SABANIA</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>75</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>50</td>
<td>300</td>
</tr>
</tbody>
</table>

The sample distribution is based on the naturally present geographic clusters (Villages). The respondents were selected according to the inclusion criteria mentioned above.

INSTRUMENTATION-

In order to gather comprehensive data which includes all aspects of the problem being studied, there are 2 main instruments-

1. Schedules
2. FGD

1. Schedules-
   - There have been no documented studies on Reverse communication, dynamics of interaction (process). Therefore there was no validated instrument which could be used for this purpose.
Thus a schedule was specifically designed by the researcher, keeping in mind all the parameters of the research questions and the objectives of the study.

At the same time the schedules were designed in such a way that data processing and analysis using SPSS software could be possible.

Some questions were pre-coded, like age, educational qualification, married female relative relation etc. but many question for which all the replies could not be foreseen, were left open ended (no pre-coding).

The schedules were used for all respondents of only for 3 groups.

1. RSH educated young women
2. Non RSH educated young women
3. Married Female Relatives (MFR) of RSH educated young women

Peer of RSH educated girls and young men are not being covered in administering schedules. The Peer of RSH educated young women are being studied to understand the influence of RSH educated young women on the dynamics of interaction and communication of their peer with the husbands. Thus this group was covered through FGDs.

Since men have never been a part of any RSH education program, they did not feel comfortable to share intimate information one to one. But they were willing to be a part of FGD.

FGD were used for all respondents of all 5 groups.

**Pre-testing**- the schedules were pre-tested in January 2008 with 5% of respondents from each of the 3 groups with which schedules were to be used. The pre-testing proved to be immensely useful in the following way-

- Helped in adding more useful questions
- Helped in arranging the chronology of schedule
- Helped in fine tuning the schedule to include more local terms used.
- Adding of more codes
- Reducing errors
CHAPTER 3 METHODOLOGY

2. Focussed Group Discussion (FGD):

- FGDs were conducted with all the 300 respondents across all 5 groups.
- An FGD GUIDE was prepared prior to conducting FGDs.
- There were 5 FGD GUIDES for 5 different groups.
- The FGDs were recorded on voice recorder as well as written documentation.
- This data again was more qualitative and has been analysed through SWOT ANALYSIS. The data from FGD has not been quantified. Only some information regarding respondent profile, spouse selection criteria and contraception usage related data has been quantified.

INSTRUMENTS USED

**TABLE: 3.2 DATA COLLECTION INSTRUMENTS USED**

<table>
<thead>
<tr>
<th>RESPONDENT GROUP</th>
<th>TOTAL NUMBER OF RESPONDENTS</th>
<th>SCHEDULE</th>
<th>No. of FGDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSH educated young women</td>
<td>75</td>
<td>75</td>
<td>5 FGD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(approximately 15 respondents in each group. 15x 5= 75)</td>
</tr>
<tr>
<td>Non RSH educated young women</td>
<td>50</td>
<td>50</td>
<td>5 FGD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(approximately 10 respondents in each group)</td>
</tr>
<tr>
<td>Married female relatives (MFR) of the RSH educated young women</td>
<td>75</td>
<td>75</td>
<td>5 FGD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(approximately 15 respondents in each group. 15x 5= 75)</td>
</tr>
<tr>
<td>Female Peer of RSH educated young women</td>
<td>50</td>
<td>0</td>
<td>5 FGD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(approximately 10 respondents in each group)</td>
</tr>
<tr>
<td>Non RSH educated young men</td>
<td>50</td>
<td>0</td>
<td>5 FGD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(approximately 10 respondents in each group)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>300</td>
<td>200 (out of total of 300)</td>
<td>25 FGDs</td>
</tr>
</tbody>
</table>
CHAPTER 3 METHODOLOGY

The above table shows the number of respondents who were administered the different instruments of data collection. There is an overlap of respondents for Schedule and FGDs. The respondents who were administered schedules were also administered to FGD.

DATA COLLECTION

Since the researcher had worked in most of these villages, prior to starting this research work, as a trainer for RSH of young girls, it was easier to gather such personal and intimate information.

The data collection was done in five phases, spread across one year 2009.

Preparation for data collection:

- After the schedules were finalised, the big challenge was to **translate it into locally known language (Hindi)**. This was to make it user friendly and for the respondents to read the schedule before giving consent or after giving response. The translation was done with the help of the local coordinating NGO at Loonkaransar, Bikaner). Since the schedule had lots of technical/medical terms used in RSH, it had to be translated into locally used terminology.

- The **printing of the schedules** was done in Delhi. Since we had kept enough space for open ended questions, the schedules had become very bulky (RSH educated girls and MFR’s schedule was 19 pages whereas Non RSH educated girl’s schedule was 13 pages. Some extra schedules were printed to meet any kind of contingencies. Carrying so many schedules to the field was a challenge (Delhi to Bikaner and Bikaner to various villages).

- The next step was **selection of translators**. The Researcher needed translators for this study because though the schedules were printed in Hindi, 80% of the respondents were more comfortable conversing in Marwari (local dialect). They could read and understand Hindi, but since the articulation was more fluent in Marwari, The Researcher did not want to lose on any information due to language barrier.
CHAPTER 3 METHODOLOGY

Options for translators

The first option was to utilize the locally available help in the respective villages where The Researcher went for data collection. This would have meant any person who was well versed with Hindi and Marwari, well versed with the local terminology used for RSH, open about the idea of giving RSH training to young women, should be of the same age group and sex as the respondents to ensure comfortable exchange of information, available from 8AM to 8PM for data collection and interviews. It would have been cost effective to find somebody in the data collection area with all these qualities. But it had its shortcomings, like- with every change in translator, the whole procedure of orientation of translators had to be repeated, the understanding of RSH concepts and attitude towards the study would have changed with every change in translator.

Looking at the above mentioned issues, it was decided to take the help of the local NGO (URMUL) and identify one local translator who has all the above mentioned attributes and could be trained for the study. This translator could then accompany the researcher to the villages and help in translations wherever needed so that consistency in data collection is maintained.

A young woman aged 17 was selected for this purpose. She was a drop out from class 11 and was preparing for class 12 exams through open school.

When the data collection started, the decision to have a trained translator with the researcher proved to be very useful and productive in getting the details of interpersonal relationship.

The first phase of data collection

This phase comprised of –Drawing a plan for data collection and mapping the villages where we had to go, in such a way that we could minimize the expenses. There were some villages which were 150 KM from the place where the Researcher was staying at; these villages were near the Pakistan border. Some villages were not reachable by a normal car and needed four wheel drive (which was expensive to hire). Thus at some places we had to leave our taxi and travel by camel cart. Since the girls would have been available together for FGD only during the months of May and June (non-agriculture
CHAPTER 3 METHODOLOGY

season), the FGDs had to be done in these two months in the scorching heat of Thar Desert.

Once the villages to be visited on route was planned, the next step was to coordinate with the local NGO URMUL to send message to their health workers in villages to gather the respondents at a given time in the village- either a school or aanganwadi. This whole process required a lot of coordinating and working without cell phones at many places.

1. FGDs were conducted with all the five groups separately i.e. 5 FGDs for RSH educated girls, MFR. 5 FGDs each for Non-RSH educated girls, Peer of RSH educated girls and Young Men. In total 25 FGDs were conducted.

2. The FGD guide was used and the proceedings were recorded on a voice recorder and hand written documentation. The evenings were spent in listening to the recordings and making notes.

The second phase of data collection

This phase included the filling up of schedules with the three groups (RSH educated girls, non RSH educated girls and MFRs of RSH educated girls).

As per the list sampling list and mapping of the villages (clusters), the schedule interviews started. One interview on an average was taking 1 hour. The travel time and Bikaner- Loonkaransar Highway being unsafe at night, data collection became a bit challenging. At many occasions the listed respondent had got married and moved to another village and in some cases another district. Thus all these (nearly 20% respondents) had to be contacted and asked if they would like to be a part of the study. Upon receiving consent from many of them, it was decided that they will be covered in the third phase of data collection.

The mornings, afternoons and evenings were spent in data collection. The nights were utilised to check the filled up schedules for any missing information, incorrect information. The forms with incomplete and incorrect information were again taken back to the field for corrections.
CHAPTER 3 METHODOLOGY

The third phase of data collection
This phase had all the missing respondents covered. In some cases the respondents were visiting the maternal house and in other cases The Researcher visited their marital house. The same schedules were used for these respondents too. This phase was characterised by more of travel time and less of data collection, as these married off respondents were geographically scattered.

The fourth phase of data collection-

The Researcher went back to the field in February 2009, to complete the remaining respondents for administering schedules who were not available during the earlier visits. This phase was full with lots of qualitative data, recorded on voice recorder too in addition to schedules.

The fifth phase of data collection
This phase was mainly of gathering peripheral data from the local NGO (URMUL), district government office, district hospital, aanganwadis, PHC(primary healthcare centres) and schools.

DATA VALIDATION
Data validation was an on-going process where all the schedules were checked for any irregularities and taken back to the field immediately.
Data cross checking was also done in some instances, where a number of women reported that they or their friends opt for termination of pregnancy in hospitals and not home. This information was cross checked at the local hospital to see what their records mentioned.
CHAPTER 3  METHODOLOGY

PHASES OF DATA COLLECTION

**TABLE: 3.3**

**PHASES OF DATA COLLECTION**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Action</th>
</tr>
</thead>
</table>
| Phase 1  | 1. Mapping and routing, transportation.  
|          | 2. Organizing groups for FGD  
|          | 3. Coordination with the local NGO                                      |
| Phase 2  | 1. Schedule based interviews of RSH, Non RSH and MFR.  
|          | 2. Listing the missing respondents  
|          | 3. Data validation and correction                                         |
| Phase 3  | Schedule based interviews of missing respondents                          |
| Phase 4  | Schedule based interviews of missing respondents                          |
| Phase 5  | Peripheral data collection from local NGO, district hospital, PHC, anganwadi etc. |

**CODING AND DATA PROCESSING**

- Schedules were partially coded after pre-testing.
- Complete coding was done after all the schedules were answered by the respondents.
- Each open ended question had variety of answers. Each response was given a unique code.
- Manual data validation was done in field itself, so that all the corrections could take place simultaneously.
- The data from schedules was entered in SPSS software using these unique codes.
- The data for the other two groups for which schedules were not used (peer and young men) was mainly qualitative.
CHAPTER 3 METHODOLOGY

DATA ANALYSIS

- The variables in this study are NOMINAL. Nominal variables allow for only qualitative classification. That is, they can be measured only in terms of whether the individual items belong to certain distinct categories, but we cannot quantify or even rank order the categories: Nominal data has no order, and the assignment of numbers to categories is purely arbitrary. Because of lack of order or equal intervals, one cannot perform arithmetic (+, -, /, *) or logical operations (> ,<, =) on the nominal data. Typical examples of such variables are:

| Gender:  | 1. Male  
<table>
<thead>
<tr>
<th></th>
<th>2. Female</th>
</tr>
</thead>
</table>
| Marital Status: | 1. Unmarried  
|              | 2. Married  
|              | 3. Divorcee  
|              | 4. Widower  |

- MULTIPLE RESPONSE questions have been used at a number of places in the schedules. Example- “Why did you not discuss contraception with your husband?” (1- No knowledge, 2- no courage, 3- felt shy, 4- was scared, 5- don’t know etc.).

- **STATISTICAL TEST USED**
  1. **Frequency tables**

    Frequency tables have been used widely to see - the Number of respondents who demonstrated reverse communication, Number of RSH educated women who feel that their RSH rights have been respected, Number of young women who wanted to use contraception but could not, Number of married female relatives who feel uncomfortable discussing RSH with young girls of their family.

    Many such data was analysed using frequency tables for different respondent groups and also same variable across all respondent groups.
CHAPTER 3  METHODOLOGY

2. Coefficient of correlation (PHI TEST)
Since the variable in this study are nominal in nature, PHI TEST of correlation has been used in order to see if there is any kind of correlation between two or more variables. For instance PHI test was used to see correlation between-
- RSH education status and marriage preference.
- RSH education status and delay in birth of first child.
- Empowerment education and increase in reverse communication.
- Rights based training of wife and sex of the spouse who initiates contraception discussion.
- Spouse who initiated Family Planning discussion and contraception method used.

Many such correlations were studied using the PHI test.

As mentioned earlier, this is descriptive research to explore a rather new phenomenon. Thus we will not be testing hypothesis in this study. This study is more oriented to identify important variables and see the correlation between them.
CHAPTER 3  METHODOLOGY

FIGURE: 3.1  RESEARCH METHODOLOGY FLOW CHART

1. LITERATURE REVIEW
2. DISCUSSIONS

FORMULATE RESEARCH QUESTIONS & OBJECTIVES

LITERATURE REVIEW

INTERNET ARTICLES

BOOKS

SELECTION OF RESEARCH METHODOLOGY

SAMPLING

INSTRUMENTATION

1. EACH VILLAGE AS CLUSTER
2. 11 CLUSTERS SELECTED
3. ALL RESPONDENTS IN CLUSTER ARE PART OF SAMPLE

DESRIPTIVE RESEARCH METHODOLOGY

CLUSTER SAMPLING METHOD

JOURNALS
CHAPTER 3 METHODOLOGY

INSTRUMENTATION

LITERATURE REVIEW, FIELD EXPERIENCE

DATA COLLECTION

1. SCHEDULES
2. FGD

DATA VALIDATION

1. PRE TESTING
2. IMPROVEMENTS
3. CODING
4. PRINTING

CONSENT FROM RESPONDENTS

DATA ENTRY

1. RSH EDUCATED GIRLS
2. NON RSH EDU. GIRLS
3. MFR OF RSH EDU. GIRLS
4. PEER OF RSH GIRLS
5. NON RSH EDUCATED MEN

SPSS

DATA ANALYSIS

1. SCHEDULES
2. FGD

CORRECTIONS AND CROSS CHECKING

CODING

QUALITATIVE
SWOT ANALYSIS of respondents based on FGD

QUANTITATIVE
1. FREQUENCY TABLES
2. CORRELATION TESTING (PHI TEST)

REPORTING RESULTS