

# CHAPTER III

## **CHAPTER 3**

### **METHODOLOGY**

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#### **3.0 Introduction**

In the previous chapter a Review of the Related Literature on the adolescence and related issues in the context of the study was presented. This review has helped to situate the present study in the proper perspective by examining the nature of the studies conducted so far, their scope, their findings as well as observations along with the research gaps. All this helped in defining the present study and its methodology. The term methodology refers to the process and procedures one adopts while carrying out the study in order to achieve the particular objectives specified. This chapter gives details about methodology followed in this study. The description of tools and techniques used, design of the study, the sample, the procedure of data collection and the outlines of the analysis of the data are described under appropriate heads.

#### **3.1 Description of Tools**

In order to accomplish the objectives of the study considerable amount of appropriate qualitative as well as quantitative data was required. The data for the present study was collected from teachers as well as students comprising the sample. The data for the present study was collected using the tools given below.

##### **3.1.1 Teachers Questionnaire**

A questionnaire with open and closed ended items, developed by investigator was administered to teachers to whom training was to be provided. The questionnaire consisted of open ended, closed ended items as well as mixed type questions where justifications were also to be provided to lend substantial support to the response. The purpose of the questionnaire was to find out the perception of the teachers regarding adolescence and issues related to them, their views as well as knowledge regarding Adolescence Education and attitude towards it.

The face validity of the instrument is established when the items in the instrument are clearly and obviously related to the phenomenon being measured, when the items are

relevant to the stated condition or purpose of the instrument and when the items are based upon whatever knowledge is available at the time of construction (Breakwell et al., 1995) The face validity of the questionnaire was established by giving it to experts. Item pool was presented to experts in social and developmental psychology. All the items that received 100% support were retained and the suggestions of the experts were duly incorporated.

The examples of the items in the questionnaire are as follows:

- i. What does the phase of adolescence signify?
- ii. Do you feel that adolescent education should be an integral part of the curriculum? Please give reasons for your answer.
- iii. Would you feel hesitant to teach certain content of Adolescence Education? If yes, please mention the reasons.
- iv. Do you think such a kind of education would overall benefit the students? Please state the reasons for your answer.

### **3.1.2 Students Questionnaire**

A questionnaire with open and closed ended items, developed by investigator was administered to the sample consisting of students of IX<sup>th</sup> std who were subjected to the Adolescence Education programme.

Basic considerations for designing of questionnaire:

- An identification of the adolescents total characteristics
- An identification of the adolescents needs
- An identification of adolescent's perception towards issues of Adolescence Education.

The first part of the questionnaire consisted of 12 open ended and 27 closed ended items. The purpose of this part of the questionnaire was to find out the self perception of the students, their choices, personal issues, attitude towards school, teachers, and education in general, their knowledge and attitude towards reproductive health matters, social relationships etc. The second part of the questionnaire was different for both boys and girls. There were 19 closed ended items for the girls. These questions ranged from a whole range of issues like physical changes they encounter, relationships with peers,

views and attitude towards sex education, reproductive health concerns, HIV/AIDS sexual abuse etc. For the boys the second part of the questionnaire consisted of 14 closed ended type of questions on sex education, relationship issues, drug abuse etc. Experts established the face validity of the questionnaire.

The examples of the items in the questionnaire are as follows:

- i. Do you at times feel that whatever is being taught to you is not important and find your studies meaningless?
- ii. Did you receive any information regarding human reproduction?
- iii. Now that you are growing up and your body is changing do you feel curious about the changes?
- iv. Do you feel that knowledge about changes you experience should be given to you in schools?

### **3.1.3 Observation Schedule (unstructured)**

The investigator used participant observation in order to assess the progress of the training programme and implementation of the modules. Unstructured observation of what goes on within the class and outside as well within the school setting helped in making field notes. These field notes were used to record the pedagogical practices adopted for module implementation, the reaction of the student's informal interactions, the day to day happening as well as the overall proceedings. The observations helped to assess the overall feasibility of the modules, the problems encountered, the lacunas as well as scope for change and modifications.

### **3.1.4 HIV/AIDS Questionnaire (pre test- post test)**

The investigator prepared this questionnaire. The questionnaire consisted of 9 open-ended questions and 10 close-ended questions. It dealt with issues like knowledge of adolescents towards sexual matters, their response towards sexual knowledge, preferential mode for getting information and basic knowledge about HIV/AIDS. Items were generated from literature review and theory as well as discussion with experts.

The examples of items in the questionnaire are as follows:

- i. When you want any information on the sexual changes you are undergoing whom do you approach and why?
- ii. Do you feel shy when there is a talk on sexual matters? If YES why and if NO why?
- iii. Why is it important for students of your age to know about HIV/AIDS?
- iv. Would you attend these programmes on sex issues and HIV/AIDS etc on voluntary basis?

### **3.1.5 Semi-Structured Interview for Teachers**

A semi-structured interview was conducted for the Secondary School teachers towards the end of the training programme to assess their overall observations regarding the programme. The interview schedule consisted of 10 open ended questions wherein the teachers were asked to express their views regarding their role in Adolescence Education, opinion about the programme, changes they observed in students as a result of the programme, training requirements, further continuation with the programme, useful and feasible aspects, problems encountered, overall effectiveness and suggestions for further improvement.

Some of the items of this interview were as follows:

- i. What kind of change did you notice in the behaviour of the students after the completion of the programme?
- ii. What is your opinion regarding the teaching of adolescence education contents through the help of the modules given during the programme?
- iii. Mention any comment/suggestion to improve the training programme

### **3.1.6 Overall Effectiveness Test**

Evaluation of the programme by the students was necessary to receive the feedback, evaluate and analyze and modify the programme. It helped in knowing the effectiveness and shortcomings of the programme conducted. Suitable modifications can thus be made in the next programme to make them more effective. Effectiveness was judged on the basis of the stated objectives of the programme contents and covered

attitudinal, behavioural and cognitive changes. The overall effectiveness of the programme was established by using a questionnaire on effectiveness for the students as well as a rating scale.

### **Effectiveness Questionnaire**

An overall effectiveness questionnaire was administered to the students to evaluate the effectiveness of the programme. It consisted of both open ended as well as close-ended questions. There were 8 multiple-choice items and 12 open ended items. These items focused on finding the students perception regarding the programme conducted in terms of how they rate the programme, the aspects that were useful and not useful, the feasibility, attitude towards the various activities, their views on the modules used, overall programme conduction, extent of learning and use in daily life situations as well as comments and suggestions for improvement. The face validity was established by giving it to experts.

The items of the questionnaire are as follows:

- i. How was the explanation given by the teachers about the various aspects of the programme?
- ii. During the programme discussion on various issues was held. Did you have any questions in your mind to put forward and discuss in the class with your teacher.
- iii. If Reproductive Health Education course is introduced in your school (either as integral part of subjects taught or as a separate subject,) whom would you prefer to teach the course.
- iv. What are your suggestions to improve the programme?
- v. List things that you learned from this programme, which would be helpful in your daily life

### **Rating scale for Effectiveness**

For measuring the extent to which the adolescents found the training programme meaningful the investigator prepared a rating scale. Items were first developed on the basis of the modules content and the overall Adolescence Education programme components. The draft rating scale was presented before the experts. The opinion, views, comments and observations of the experts was carefully scrutinized and based on them

the draft rating scale was modified. It consisted of 36 items on a 3-point scale: *To A Large Extent, To Some Extent and Not At All*.

### **3.2 Design of the study**

Qualitative research was considered relevant to this study as it enables to generate more information on certain issues, which cannot be easily obtained through quantitative methods and thus supplements and strengthens the quantitative information collected. The study followed the modular approach. The study was designed so as to develop and implement an Adolescence Education programme on a selected sample of adolescents and evaluate the changes in the sample as a result of the training programme.

#### **3.2.1 Selecting the school**

The first step was to find a school which would give the investigator the permission to execute the Adolescence Education programme keeping in view the duration of the programme as well as the implementation strategies. The nature of the present study required the researcher to spend substantial time (a year) in school visiting it very frequently (3 to 4 times a week usually) and interacting with the teachers, students and in general monitoring the situation at school. For this the researcher required adequate support and rapport with the school authorities, principal, teachers as well as students. The main task of the investigator was to persuade the schools for accommodating the Adolescence Education programme since many school refused on the grounds of having an already packed academic schedule. The cooperation of the school was extremely indispensable since the programme was to be implemented with the aid of their support for the entire academic session.

#### **3.2.2 School Profile**

Through purposive sampling one co-educational English medium School in Baroda was selected. The school is affiliated to Gujarat Secondary Board of Education. The investigator sought permission from the principal and staff to conduct the study. The procedure as well as research intentions were expressed clearly and information related to the study was provided to them. What was going to be done with the information was

clearly told with the assurance that the data collected would be purely used for research purposes. The school authorities showed willingness and enthusiasm to participate in the study.

### **3.2.3 Sample of the study**

All the 10 secondary schoolteachers teaching in the school were taken as a part of the sample. These teachers were teaching subjects like languages, social science, science, mathematics, computers as well as physical education. Adolescents are particularly vulnerable in the age group of 15 – 17 years and in great requirement of a need based programme. Hence this programme was implemented on the middle adolescents. The School had 2 divisions of IXth std. Both the divisions were considered and the total students sample was 65 out of which 40 were boys and 25 were girls.

### **3.2.4 Data collection**

The study was conducted in three phases.

- Pre Adolescence Education programme implementation phase,
- Programme implementation phase
- Post Programme implementation phase.

Data was collected phase wise.

#### **Phase 1: Pre Adolescence Education Programme Implementation Phase**

Prior to the actual implementation of the Adolescence Education training programme data was collected regarding the attitude, perception and knowledge of the teachers and adolescent students comprising the sample towards issues significant to adolescence and falling in the domain of the designated training programme.

#### **Data Regarding The Awareness Level Of The Secondary School Teachers Regarding Adolescents And Adolescence Education.**

Data was collected from the teacher's constituting the sample of the study. Before the commencement of the workshop for teachers regarding adolescence education they were asked to fill in the questionnaire for teachers. The teachers were oriented regarding the nature and purpose of the questionnaire. Through the administration of this questionnaire



data was collected regarding the knowledge, awareness, sensitivity and attitude to the teachers towards adolescent and Adolescence Education.

### **Data Regarding The Awareness Of The Students Of IX Th Std Regarding Adolescents And Adolescence Education**

To supplement relevant data regarding the Adolescents views, perception, problems, queries, attitude etc, Student's Questionnaire was used. The IXth std students comprising the sample who were to undergo the Adolescence Education programme were explained the procedure to fill up the questionnaire. The students were given the option of not disclosing their identities in the questionnaire so as to assure the confidentiality of the data and enable them to freely respond without doubts or inhibition.

### **Data For Module Preparation**

In order to prepare the modules by suitably linking them with the plug in points via the curriculum it was considered necessary to analyze the textbooks. Documentary analysis was done in terms of the analysis of IXth std textbooks prescribed by Gujarat Board of Education. Textbooks of subjects like Languages, Science, Mathematics and Social Sciences were used. An in-depth content analysis was done the plug in points in the various topics in subject textbooks .All the topics of the 9<sup>th</sup> std books were listed and extent of linkages between topics and Adolescence Education were identified. With the help of these plug in points the modules were designed.

### **Phase 2: Programme Implementation Phase**

For the success of any intervention programme the focus is to implement it on the target sample and evaluate the outcomes. The Adolescence Education programme was implemented in the school setting by employing the modular approach. Field notes were used to record the unstructured observations carried out by the investigator in the school setting regarding the classroom climate, interaction between teacher and students, student participation in activities etc. While the modules were being implemented the data regarding the modules effectiveness, implementation strategies, problems encountered etc was collected by the investigator was collected through participant observation. An

interactive session on reproductive health matters with special focus on HIV/AIDS was held by leading doctor for providing authentic information and enabling the students to clarified their doubts. Questionnaire on HIV/AIDS was used as pre and post. The students were asked to fill a questionnaire on HIV/AIDS independently (Pre test). Following this the students were exposed to session and modules on HIV/AIDS and then administered the posttest.

### **Phase 3 Post Programme Implementation Phase.**

Final assessment of the Adolescence Education programme implemented was done by administering the Semi-structured interview for teachers to assess their overall observations regarding the programme as well as effectiveness questionnaire and rating scale administered to students.

### **3.3 Data Analysis**

Data was analyzed qualitatively as well as quantitatively. Content analysis, frequency, percentages etc techniques were used. The data analysis was done in three phases:

#### **Phase 1: Pre Adolescence Education Programme Implementation Phase**

Questionnaire was administered to the teachers and the items were analyzed qualitatively using content analysis as well certain items were quantified to provide relevant support to the qualitative data. A questionnaire was also administered to the students. This questionnaire was qualitatively analyzed along with quantitative assessment techniques of percentages and frequencies.

#### **Phase 2: Programme Implementation Phase**

The data from the participant observation was used to prepare field notes. The data analysis consists of reading and re-reading the field notes. The emergent patterns were listed in terms of the interaction with the pupils, teachers, overall classroom interactions and climate.

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**Phase 3: Post Programme Implementation Phase**

The data from the questionnaire on HIV/AIDS, semi-structured interview with teachers and questionnaire on effectiveness and rating scale was analyzed.

**Table 3.1: A summary of how the Data was analyzed**

Phase	Area of enquiry	Sources of data	Tool	Technique for data analysis
<b>Pre Adolescence Education Programme Implementation Phase</b>	Preparation of the programme	Documents	Textbooks of all the IX th Std subjects prescribed by the Gujarat secondary board of education	Content analysis
	Teachers perception and attitude	Teachers	Questionnaire	Frequency Percentage
	Adolescents views, perception, problems, queries, attitude	IXth std students	Questionnaire	Frequency percentage
<b>Programme Implementation Phase</b>	Proceedings of the study	Classroom sessions	Participant observation Field notes	Content analysis
	HIV/AIDS	Students	Pre test- Post test Questionnaire	Frequency Percentage
<b>Post Programme Implementation Phase</b>	Effectiveness of the programme	Teachers	Semi structured interview	Content analysis
		Students	Questionnaire on overall effectiveness Rating scale for overall effectiveness	Frequency Percentage