

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

The methodology chapter of the study provides in-depth knowledge about what type of methodology was followed by the researcher in a particular study. It gives direction and suggestion for other researchers to adopt it. This chapter includes research design, selection of school, Programme details, and development of Programme, Implementation of programme, tool and techniques for data collection, tools construction, and phases of data collection, data analysis & interpretation, units of data analysis, procedure of data analysis, establishing validity and reliability of Data and establishing credibility of the programme.

#### **3.1 Methodology**

The study is a Qualitative Descriptive Case Study. All inquiry entails description, and all description entails interpretation. Knowing any phenomenon (or event or experience) requires, at the very least, knowing the "facts" about that phenomenon. Yet there are no "facts" outside the particular context that gives those facts meaning. Descriptions always depend on the perceptions, inclinations, sensitivities, and sensibilities of the describer (e.g., Emerson, Fretz, & Shaw, 1995; Wolcott, 1994). "There is no pure looking with a naked, innocent eye" (Pearce, 1971, p. 4), and there is no "immaculate perception" (Beer cited in Wolcott, 1994, p. 13). As per Sandelowski, M. (2000) Researchers seeking to describe an experience or event select what they will describe and, in the process of featuring certain aspects of it, begin to transform that experience or event. Researchers conducting qualitative studies want to collect as much data as they can that will allow them to capture all of the elements of an event that come together to make it the event that it is. Baxter, P & Jack, S (2008) elaborates that a descriptive case study is the one which describes an intervention or the phenomenon and the real-life context in which it occurred.

##### **3.1.1 Research Design**

According to Yin (2003) a case study design should be considered when:

- (a) The focus of the study is to answer "how" and "why" questions;
- (b) You cannot manipulate the behaviour of those involved in the study;

- (c) You want to cover contextual conditions because you believe they are relevant to the phenomenon under study
- (d) The boundaries are not clear between the phenomenon and context.

**Figure\_3.1: Research Design.**



The researcher aims at developing a Socio-Emotional Learning Programme for the enhancement of social and emotional learning among preschoolers. This research study was framed as an embedded single-case design. The case study is about enhancement of SEL through SELP among preschoolers of Jr. K.G. A. In the present study the Case is the class of Jr. K. G. A as a whole, while the smallest units were the individuals, the preschoolers studying in it who were termed as children in entire programme as well as several intermediary units also important like researcher, class teacher, helper and Parents.

This research study was framed as Qualitative descriptive case study which gave the researcher an opportunity to look closely and study in depth, the social and emotional development and learning among preschoolers in a specific context.

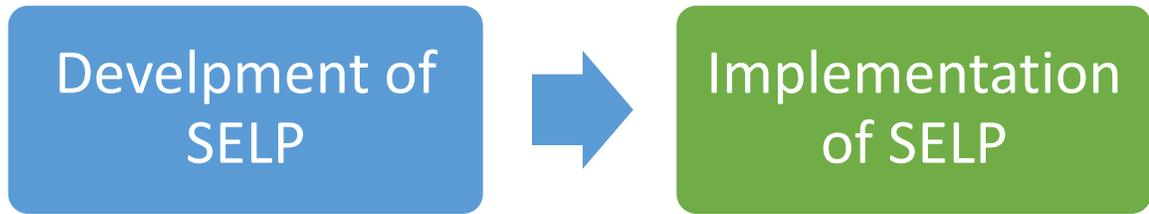
### **3.1.2 Selection of School**

The case study was chosen as a Purposive case;

- ❑ Where children from mixed socio-economic background were present.
- ❑ The preschoolers of 4-5 yrs. of age studying in Jr. K.G. A was an average representative age of preschoolers because it falls in between Nursery and Sr. K.G. so it's the age where a lot of developmental changes can be brought about. Nursery children their fine motor skills are still not developed so they are not developmentally ready for many activities and in Sr. K.G they start showing all sort of development. Those who are developmentally slow in Sr. K.G they have already missed the opportunity of Jr. K.G stage where the problem could have been resolved with earliest interventions as it's the right time of starting any kind of intervention to remove the developmental problems or not let any development delays occur. Thus, the class of Jr. K.G. A in the particular school was taken as a Case for the study.
- ❑ It was a preschool with appropriate infrastructure facilities, where SELP would have been implemented without any hindrances. It had playground, swings, audio-visual room, art and craft room and enough space classroom.
- ❑ And lastly, the readiness of the school, and the involvement and cooperation of the teacher and helper in carrying out the activities during the development and implementation of the programme on preschoolers for one whole academic year. The Class teacher cooperation and coordination was very essential because without her acceptance it could be difficult for the children to accept the researcher as another teacher.

### 3.2 Programme Details:

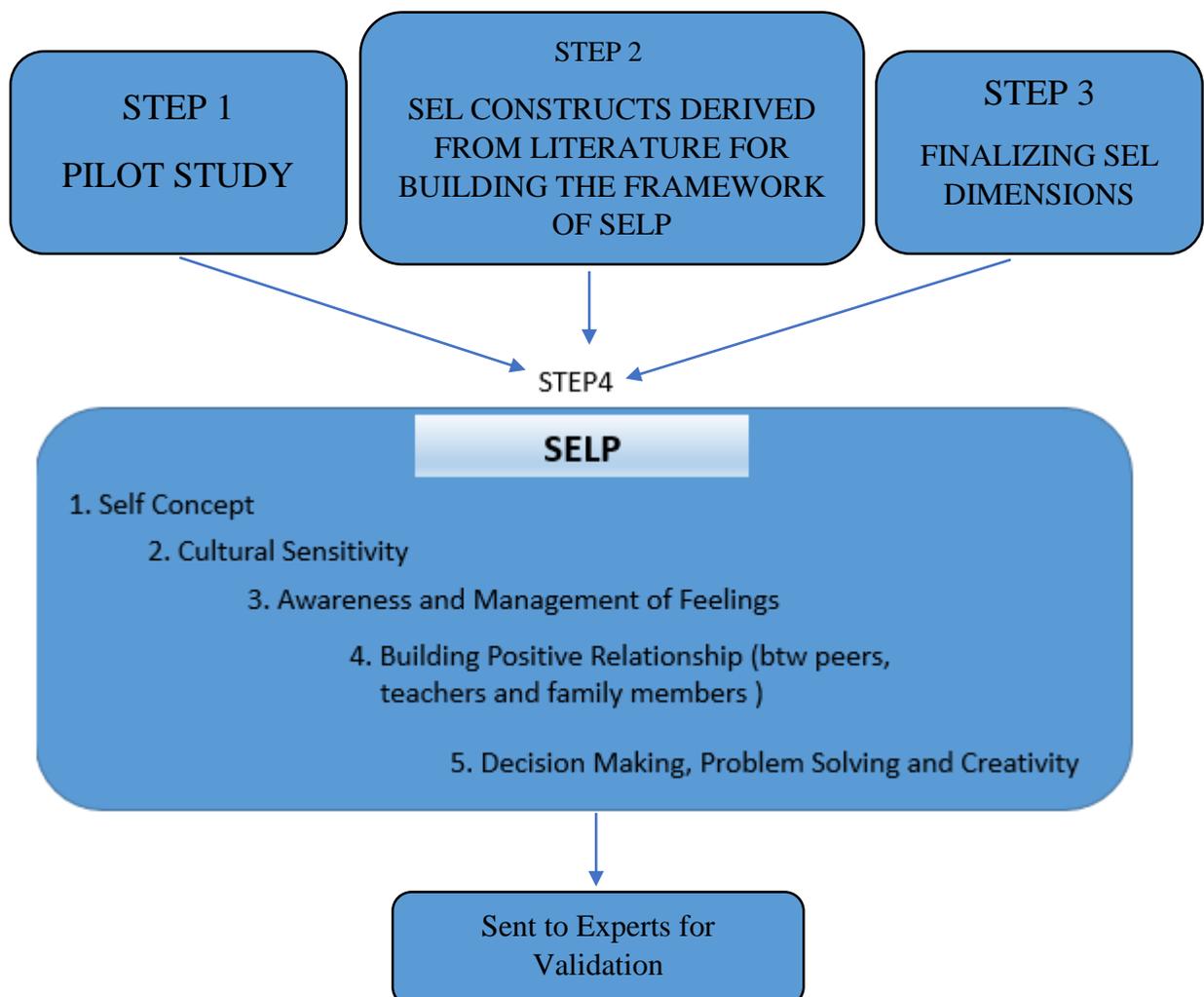
The SELP program was described as following in two sections;



#### 3.2.1 Development of the programme:

The development of SELP programme was further divided into three steps which are as follows;

**Figure\_3.2: Steps of development of SELP**



### **Step 1: A pilot study**

A pilot study was conducted where the researcher took eight preschools (Appendix 5.2) purposely representing the private as well as public preschool; like Balwadi, Montessori, Kidzee and preschools attached to higher secondary private schools etc. The researcher visited these schools interviewed some teachers, conducted Focus Group Discussion with teachers of some schools, attended the classes in every school and observed them too. The talks with teachers helped the researcher to gain insight on the curriculum followed, as well as the designing of daily, weekly, & monthly activities for preschoolers. About the curriculum, the schools A, B, D & G followed their own, age appropriate curriculum developed by the school itself. School C followed Montessori, E followed River side curriculum, F followed Kid Zee curriculum and H was a Balwadi with a progressive curriculum. The researcher observed the different kinds of curriculum, being followed in the schools, and implications were drawn for designing activities in Socio-Emotional Learning Programme (SELP). From the school F, that was having Kid zee curriculum, the researcher got the idea of designing every activity with developmental objectives. From School C, with Montessori curriculum the activities had to be designed with prepared environment. From the progressive curriculum teachers designed the themes and objectives of curriculum but based on children's interest and including them in every possible way into learning, enquiry and problem solving. The school A, followed twenty concepts in a year, one of them being "community helpers". This theme concept, was observed in other schools too where the activities were designed on the basis of concepts.

Thus, through this and the literature, the researcher was able to arrive at an understanding that Hands on experiences, experiential learning, investigations and experimentations had to be the part of this SELP. Then there were some schools (D & I) that were seen following a very old and outdated methodology of having eight periods with very constructed framework like mathematics class, dance class, computer class etc. It appeared as if Maiyani (1989) findings were still true that there was emphasis on formal learning and education. More of play way methods were required to be incorporated. The researcher didn't want to focus on desirable or undesirable elements of 3R's instead wanted to focus on socio-emotional development by creating an environment where children will learn. As

well as wanted to focus on learning through fun. The art and craft, or painting was found to be very mechanical in school D. The students used to come to the teacher, who used to hold the thumb and dip in color and put the imprint on their worksheet and send the child back keeping the workbook. There used to be a bee line for even such activity. Further there were more than 20 students which was not according to the guidelines suggested by the policies. The policies suggest teacher-pupil ratio of 1:20. The art rooms were missing in some schools. The space was not adequate for outdoor games in franchise schools. The progressive syllabus (i.e. self-developed) had Topics taken like 1. Myself 2. Nation 3. Transportation 4. Community helpers. This helped the researcher in designing of the activities but the researcher had to refrain herself from going into subjects like mathematics, English or science, but designing a programme that led to not only SEL but also took care of holistic development. It was developed in such a way that cognitive knowledge could be embedded in the frame of this SELP.

The focused group discussion with teachers in one of the schools (School C), helped the researcher in understanding the Pedagogies used by teachers for preschoolers. They were as follows: Field Trips, projects every month, Visits to Sand pit, twice in a week, Dance, sports, music Cooking experience etc. E.g. Bhel puri: Each child was called to bring different things required for the preparation of Bhel. In circle time then they all mixed it and ate it.

Parents association with the school was encouraged like in Annual concert, where parents volunteered in the event. Parents Meet once in every month was organized. Within cultural context they celebrated Dress Day, Festival celebration, Party dress at 31st Dec, Valentine's Day etc. Some of the healthy strategies were followed that would definitely enhance SEL. There was rotation of seats involved which was not required if the number would be twenty as well as the seating arrangement be a circle. According to the teacher's children took 10-15 days to get trained about "Myself" - my shelf, my books, me, my family, my school, body parts concept. Training in life skills was done in circle time. It was done during class hours when they used to be free. Self-concept in one of the school (School C) was taken care off through these activities like Serving food on by own in Jr. K.G., Counting plates- Each had to count 5 plates and arrange them, doing the bundling of

their books. (As soon as they came to school they took out books (5), they identified and arranged them in separate bundles). It was a good practice but self-concept is much more than this. It requires a lot of different opportunities, initiatives, new exposure, and experiences and in order to get it enhanced, proper activities need to be designed. It has to be made a part of curriculum and focused upon just like cognitive development.

School E had a very involving and fun filled prayer assembly, where the children had to present rhymes, stories and skit. This is how the researcher took the anecdotes from the pilot study about the pedagogies followed by the teachers, the curriculum followed in the school and the kind of activities designed for preschoolers. The researcher also made following observations wherein:

- ❑ The schools followed different curriculums. At some schools, the curriculum was quite rigid, mechanical & structured.
- ❑ The school infrastructure was varying and inappropriate in some schools. The Kid Zee, Montessori franchise had an age appropriate curriculum but some of these were being run in small houses with small gardens and no play grounds.
- ❑ The planning and designing of activities was not holistic and it did not focus socio emotional development in most of the schools.
- ❑ Some schools still focused on traditional outdated practices for Preschooling where learner was not at the center of learning but teachers were. There focus was still on formal learning & education and not on developmental practices.

The above description gives a gist of the curriculum, pedagogy and learning strategies adopted in the preschools. The scope and limitations of the preschool approaches to learning helped the researcher design the intervention program. The positive factors were taken as a baseline and the unfavorable factors/conditions were avoided and minimized in the intervention program. The lacunas in the existing pedagogical practices lead the researcher to identify the missing aspects and were carefully crafted in the SELP.

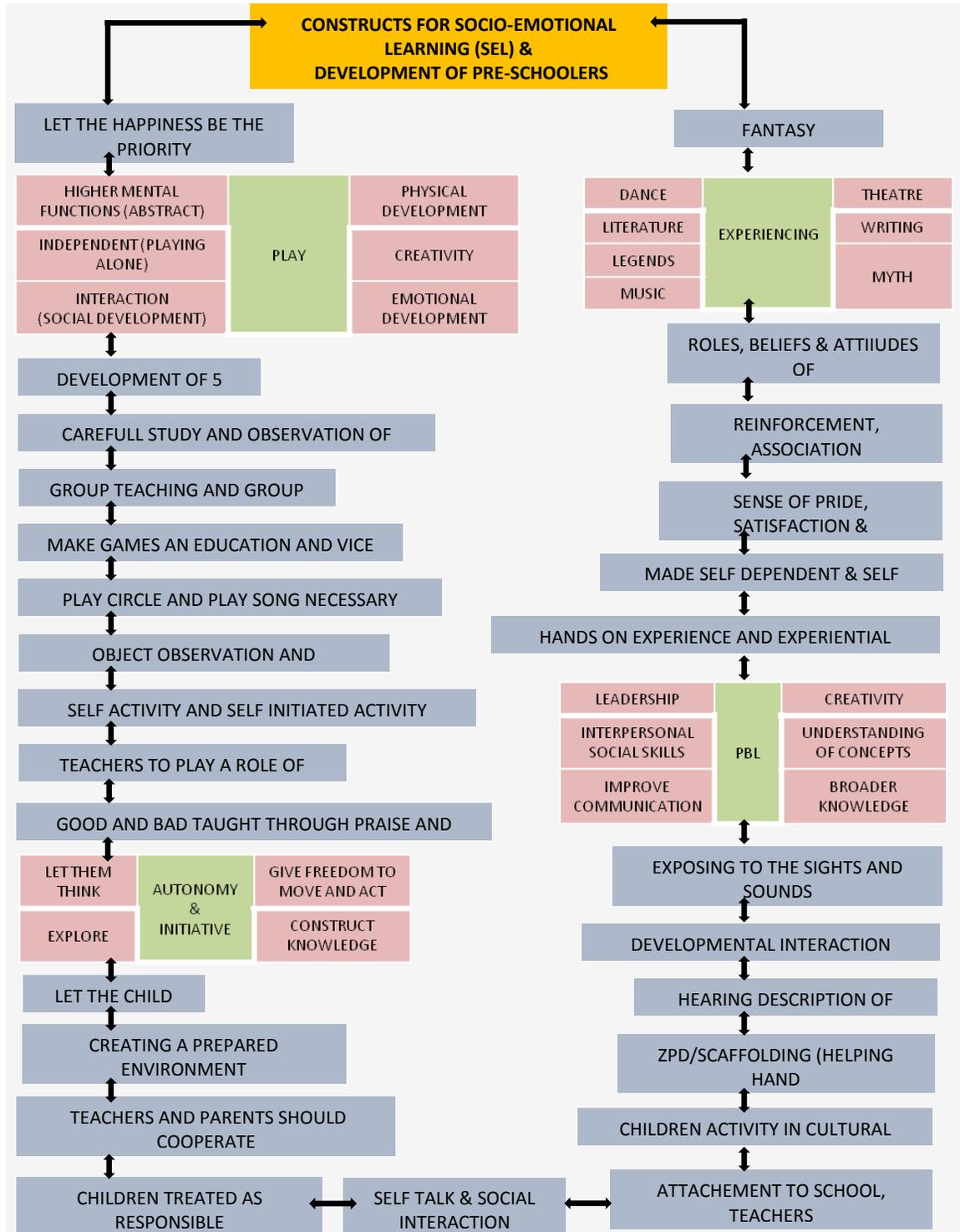
The pilot study helped the researcher to choose a school for the case study which had appropriate infrastructure, suitable working culture and human resources. Furthermore, the

psychological, educational theories, policies envisaged for preschool education helped the researcher, design the intervention program with robust theoretical background.

**Step 2: Identification of SEL constructs for building the framework of the SELP**

Identification of SEL constructs that were derived from the social and emotional development theories and views of educationist and psychologists on Preschoolers have been embedded together in order to develop SELP. This is represented in Figure 3.2.

**Figure\_3.3: Constructs for SEL & Development of Preschoolers**



The researcher designed the activities for SEL having the basis of the above framework and constructs in mind. The constructs mentioned are derived from research and literature which lead to the enhancement of SEL.

### **Step 3: Finalizing SEL Dimensions**

The researcher has come out with five SEL competencies through a thorough review of Collaborative for Academic, Social and Emotional Learning (CASEL, 2012), competencies given by Durlak et al. (2011), objectives of preschools as stated by Kothari commission (1964) and objectives of Early Childhood Education given by Curriculum Draft 2012. The five competencies that have been mentioned as dimensions in the study are as follows:

1. Self-Concept
2. Cultural Sensitivity
3. Awareness and management of feelings
4. Building positive relationship (between peers, teachers and family members)
5. Decision making, problem solving & Creativity

**Step 4:** The output of Step 1, 2 & 3 was assimilated to develop an intervention programme- Socio-Emotional Learning Programme and was sent to experts for validation. The final Socio-Emotional Learning Programme was developed based on the suggestions of the experts from the field.

### **3.2.2 Implementation of the programme:**

Socio-Emotional Learning Programme was implemented for one full academic year 2015-16. The researcher first oriented the parents and teachers about the programme. The formative, continuous observational assessments were made for the children and it flowed as per the experiences planned in the programme. Formative continuous assessment implied making field notes of the development/learning of the child, by interpreting the evidence from the day to day experiences of the child with the purpose of recognizing and encouraging strengths and addressing learning/developmental gaps. The five dimensions were implemented in a logical flow with one following another. Every dimension took around one to one and a half month. By the end of the SELP there was an enormous

videography data that provided evidence regarding enhancement of Socio-Emotional status of preschoolers. The protocol to be followed is mentioned in the programme given below.

### **3.3 Tools and Techniques for data collection:**

The researcher used several tools and techniques to collect data in order to attain the objectives of the study. These tools and techniques have been mentioned below

**a) Socio-Emotional Status Scale:** SES scale was implemented on parents of the preschoolers before the intervention to find out their Social and Emotional status. The researcher developed the scale keeping in mind the five dimensions of SELP. The scale was developed keeping in mind the developmental characteristics of children of 4-5 yrs. of age. It was used again later after the intervention to find out the extent of enhancement in socio-emotional learning of preschoolers. (Appendix 1.2)

**b) Observation checklist for teacher** in order to note down the social and emotional pattern of children, while carrying out programme based activities. (Appendix 1.3)

Researcher did direct as well as participant observation. Field notes, and videography were taken during the observation.

**c) Participant Observation:** The data for the present study was collected through participant observation. In order to conduct the participant observation, the researcher took the role of the teacher. For preschoolers it is important to develop a bond with them, make them feel safe and secure. Thus, the researcher took entire one month (April, 2015), before starting with SELP, for helping the class teacher and attending the classes along with the teacher and playing with children to build a bond with them and gain their trust. This is how participant observation was possible.

It helped the researcher to know how her engagement with children to enhance socio-emotional learning was working. Whether the activities were relevant for children, whether they liked it, enjoyed it or needed some changes? It helped the researcher to know the inner world of children, being part of it.

**d)Videography:** All the seventy activities conducted under the five dimensions namely Self-concept, Cultural sensitivity, awareness and management of feelings, building

relationship with peers, teachers & parents and last one being problem solving & decision making were recorded. Each activity video varied in its time period depending upon the availability of the time slot and feasibility of preschoolers. It helped the researcher to capture the entire experiences of preschoolers as it is, without any manipulation and made it possible for the researcher to observe the behaviors of eighteen children minutely and simultaneously playing and replaying it.

**e) PTA meets:** the researcher was there in PTA meets of the school to hear out the parents, discuss the status of socio-emotional learning of children or developmental delays or misconducts etc.

**f) More flexible talks and conversations** with the children, teachers and their parents were also conducted by the researcher from time to time in order to know the progress, discuss the misconducts or to make necessary changes in the programme. The researcher used to be there with children at the gates of the school when they left the school premises. Most of the parents came to pick their children and it was the responsibility of the class teacher and researcher to hand over the kids to the parents, so it was the best time for day to day conversations and constant exchange of information between researcher and parents regarding their development/learning, queries etc.

**g) Me Book:** It was a part of SELP and was maintained for individual child. It contained anecdotal records of various activities, samples of drawing, art and craft, observation notelet.

**h) Annual Performance (AP) of the class:** The researcher also organized performance based Annual Class presentation on SEL where the children themselves performed role play, sang National song and rhymes, gave PPT presentations and introduced themselves thus reflecting what they learnt.

**i) Parents feedback:** Parent's written feedback was taken once the entire socio-emotional learning programme was over, regarding what changes they observed in their children because of the SELP.

### **3.3.1 Tools Construction**

From the above-mentioned tools and techniques, Socio-emotional status scale and observation check list were constructed by researcher. The descriptions of construction of tools are presented below. In order to collect the data on Socio-emotional status of children between the age group of 4 to 5 yrs. old from the parents, researcher constructed Socio-emotional status scale. Separate questions were constructed for each dimension such as Self-concept, Cultural sensitivity, Awareness and Management of Feelings, Social Relationship and Decision making & Problem solving. Researcher developed the scale keeping in mind the study objectives, research questions, nature of data required, and children's age. In first step: in order to conceptualize in-depth knowledge about Socio-emotional development and learning, researcher went through the books, related literature, journals and articles. Identified the characteristics of children between age group 4-5 yrs. old, the developmental milestones and the red flags seen in this age group during development. While identifying it was kept in mind how these various characteristics fall in five different dimensions identified by the researcher.

References were taken by the researcher from Ages & Stages Questionnaires (Squires, J., 2002) and NCERT published guide books to finalize the items. The items for entire socio-emotional development were framed which represented the five dimensions of SELP and also the entire status of socio-emotional development among children of 4-5 yrs. old. In second step: further it was discussed with experts and scholars to make the scale more effective and to collect the complete data on SEL. In third step: Experts guidance and more references were taken by the researcher to finalize the SES scale or the items based on experts' advice. The items in the scale consist of all the indicators of Socio-emotional status of children. In fourth step: developed tool was sent to the subject experts for validation to ensure the content validity, process validity, and appropriateness of items

The observational check list was developed by the researcher keeping in mind the dimensions of Social and emotional development given by Hurlock (1981).

### 3.4 Phases of Data collection:

The entire study was carried out in three phases.

**Figure\_3.4: Phases of Data collection**



**First phase:** the researcher **visited eight schools for covert observation (Appendix 5.2)** with an open mind to get an idea of curriculum taught, pedagogy used by teachers, use of play-way methods, safety and security of children, behavior patterns of children etc. The researcher observed the activities conducted in these preschools and the socio-emotional indicators of development which were useful in designing SELP. The Researcher also administered Socio-emotional status (SES) scale on parents of selected case to know the level of socio-emotional learning among the children in the selected preschool.

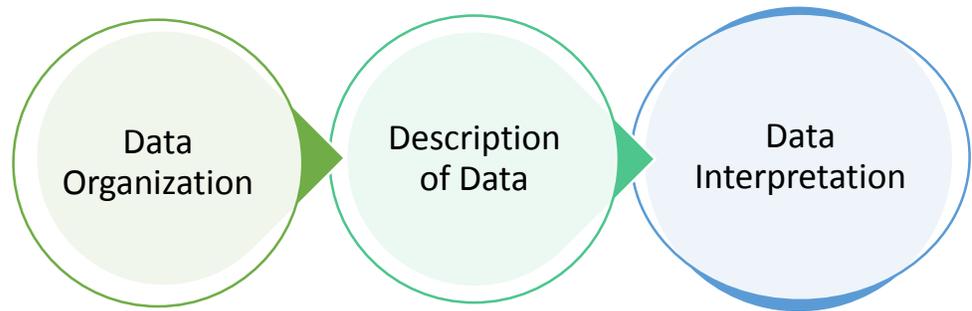
**Second phase:** The Researcher implemented the SELP programme on the identified/ designated school according to the time table (appendix 5.1) designed for various activities leading to the enhancement of social and emotional development and learning. The researcher got the support of the class teacher and helper whenever and wherever required. Many times, it was not possible to carry out the activity single handedly so the class teacher was informed beforehand to be present. The data was collected mainly through Participant observation, Videography and Observation check list.

**Third phase:** To know the extent of enhancement in socio-emotional learning among the children in the selected preschool after the implementation of the SELP programme, again the researcher implemented the same Socio-emotional status scale on parents used in first phase and prepared children for performance based Annual Class Presentation based on entire SELP.

### 3.5 Data Analysis and Interpretation:

The data was analyzed qualitatively. The 3 steps of qualitative data analysis were as follows:

**Figure\_3.5: Three steps of Qualitative Data Analysis**



The qualitative Data Analysis strategies followed by the researcher were, ongoing analysis as well as analysis at the end. Analysis was done with the help of explication and summarizing content analysis. Exact verbatim of teacher and parents were noted and interpreted, as well as transcription of seventy videos of fifty eight activities within SELP was done that were the anecdotes of the programme implemented throughout the year. Once the videos were transcribed and analyzed, a data sheet for relevant verbatims was created activity wise under each dimension for all eighteen children. (Appendix 7.1). Another data sheet was created based on the previous one by identifying relevant behavioral constructs under the five dimensions of SELP (Appendix 2.2) and the data was presented in Chapter 5. The annual performance data was analyzed. Information obtained with regard to Socio-Emotional Status of preschoolers from parents was analyzed by comparing the total scores of pre Socio-Emotional Status Scale (SESS) and post Socio-Emotional Status Scale (SESS). Observation by the teacher for ascertaining socio-emotional behavior of students was analyzed using frequency. Finally, triangulation of data was done to arrive at the findings. The coding for preschoolers has been given in (Appendix 2.3). And the researchers coding was done as 'F' for Facilitator and Class Teacher was coded as 'VM' in the entire analysis.

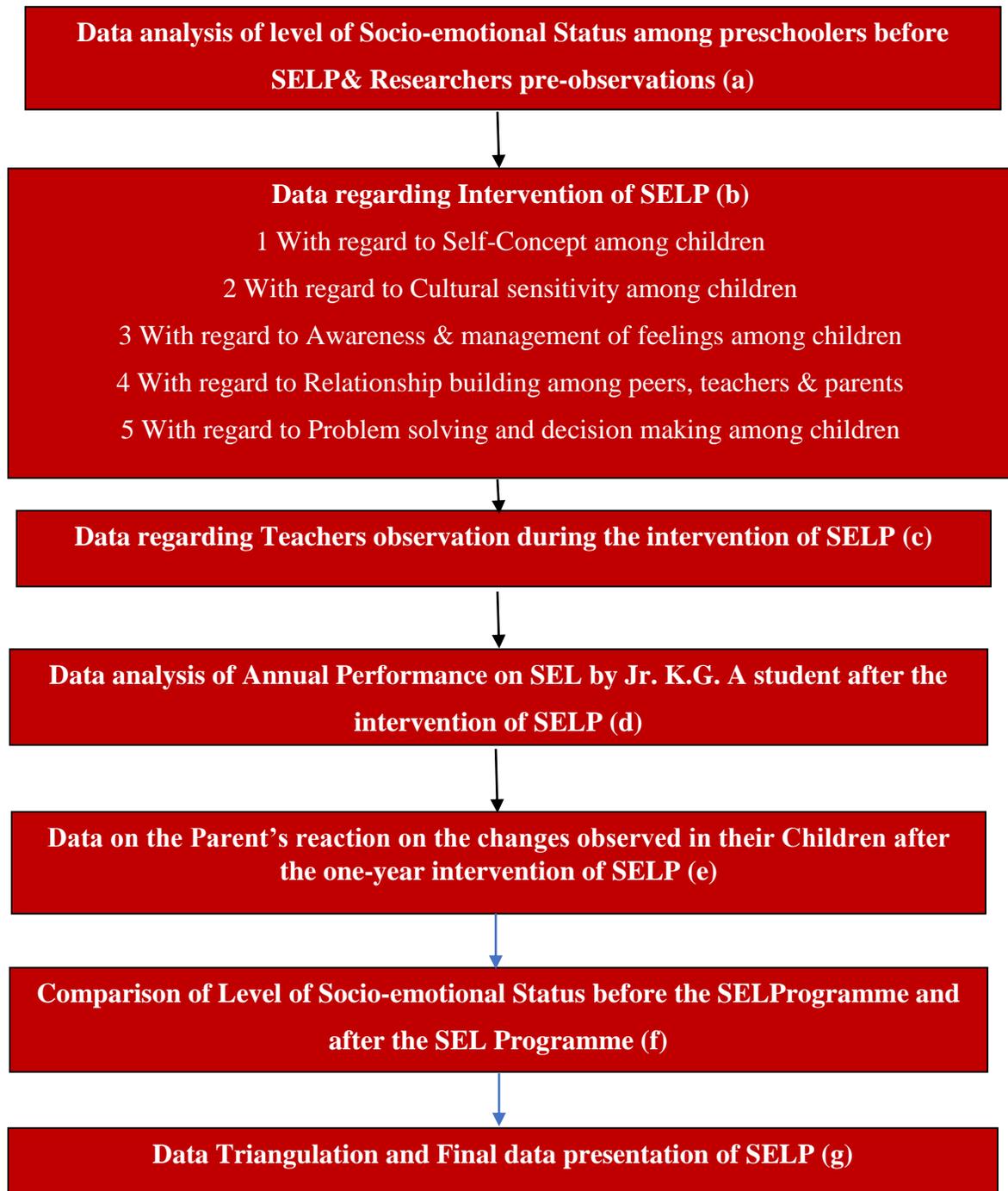
#### 3.5.1 Units of Data Analysis

The unit of analysis defines what the case is? Whether it is an event, a process, an individual, a group or an organization (GAO, 1990; Yin, 2009). Here the children form an important unit or they form the entire case of Jr. K.G. section A. Hence the class of Jr. K.G. section 'A' forms the case and its units are the eighteen children (S1-S18), the teacher, researcher and the analysis of events and products that involved the interaction between two or more participants. It's a single case study with embedded units where all the participants form the units of the case. The ability to look at sub-units that are situated within a larger case is powerful when you consider that data can be analyzed within the subunits separately (within case analysis), between the different subunits (between case analysis), or across all of the subunits (cross-case analysis). The ability to engage in such rich analysis only serves to better illuminate the case (Baxter & Jack, 2008).

### **3.5.2 Procedure of Data Analysis**

These sections given in Fig. 4.1 present the analysis and interpretation of data, objectives wise. The data presented in section (a), corresponds to objective one; to study the existing level of Socio-emotional status of preschoolers. While section (b) & (c) corresponds to the objective two and three, about the development of SELP. The data analyzed and interpreted under Section (d), (e), (f) & (g) corresponds to the fourth objective i.e. to study the extent of enhancement of Socio-Emotional Learning among preschoolers. Explicative and summary content analysis and lots of paraphrasing was done for (b) (c), (d) and (e) sections of Fig 4.1. For (a) and (f), frequency and comparative graphs were obtained and described. The section (d) that was data analysis of annual performance on SEL also included principal feedback and section (f) parent's reaction; included their feedback on their children's status of SEL after the implementation of SELP.

**Figure\_3.6: The procedure of data analysis and interpretation for objective one, two, three and four**



In every SEL dimension there were at least eight to ten activities. Every activity was organized as given below:

Each activity is described in following steps in SELP:

- ❑ Name of the activity
- ❑ Kind of activity
- ❑ Seating Arrangement
- ❑ Principle of early learning on which the activity is based
- ❑ Description of the activity
- ❑ Analysis
- ❑ Observations
- ❑ Developmental objectives attained

The video recordings were transcribed with utmost care and then the analysis was done to identify the socio-emotional behavior. Since this was a tedious process there were chances of missing some significant behaviors. Therefore, in order to avoid such omissions, time and again the video was replayed while transcribing. Finally, the video transcribed sheet was analyzed along with information obtained through other sources like videography, researchers diary notes, participant observation, Observational check list by teacher, Annual Performance by preschoolers on SEL, conversations with parents during PTA and school closing hours, parents feedback and information about their children, filled in SES scale after the implementation of SELP, for a complete holistic view.

### **3.5.3 Establishing Validity and Reliability of Data**

The triangulation of data was done at the end to enhance internal validity. The data from various sources i.e. preschoolers, teachers, parents, Principal and the researcher was triangulated to enhance internal validity. While case studies do not aim to generalize to populations similar to experiments, they aim to generalize to theories (Yin, 2009). However, it is worth noting that methodological literature provides little consensus regarding how exactly analytical generalizations can be achieved (Baskarada, 2014). Still the researcher has tried best to generalize the findings to theories that coincide with what theories has stated to bring in external validity. Reliability has been achieved by creation

of a case study protocol i.e. by standardizing the investigation and development of a case study database.

#### **3.5.4 Establishing Credibility of the SELP**

The Counsellor was called upon to stay with children for at least two days. The counsellor called was also one of the expert who checked the SELP before implementation. She visited the children and saw how the programme was carried out. The researcher carried the activities as scheduled and planned and the counsellor took the seat behind the class and spent two days with the class (Appendix 6.1). She also observed the children, their behaviours so that if any kind of developmental delays or problems are there among children then instant actions could be taken to help the child and the researcher could plan something extra for that child within SELP. The counsellor however gave a green flag to all the children with just one child, who was having developmental delays in her speech and it was found that she was already attending the speech therapy classes. Still knowing about children who were the units of case in every way was the responsibility of the researcher and it brought credibility to the SELP.