CHAPTER-2

METHODOLOGY

This Chapter describes the research design, sample, variable, tools and procedure used for data collection and analysis.

2.1   RESEARCH DESIGN:

The study was designed in two phases. Phase one consisting of primary care givers and their children. The sample was chosen from Hyderabad and Vadodara considering the inclusive and exclusive criteria. Initially children were chosen within desired age group from selected schools and then their parents were asked to administer the emotional intelligence scale. Teachers were asked to rate children for social competence measure and children self rated through children attribution style questionnaire for optimism measure.

Table no.2.1.1 R*esearch Design*

Hyderabad				Vadodara			
Parents		Children		Parents		Children	
Mobile	Local	Mobile	local	Mobile	Local	Mobile	Local
Emotional intelligence scale	Emotional intelligence scale	CASQ and SSBS	CASQ and SSBS	Emotional intelligence scale	Emotional intelligence scale	CASQ and SSBS	CASQ and SSBS

Phase two consist of social exercise done on 10 % of the primary care givers and their children. Social exercise given to parent child dyads and they were observed by the researcher according to the pre- decided parameters. Parent child interactions were rated by standard protocol and coded data was used to suffice the information gathered through the survey.

2.2   SAMPLE:

The sample was taken from urban population of Hyderabad and Vadodara City. The total sample consisted of 602 subjects comprising of 301 parent-child dyads. The sample was collected through multilevel sampling method. In the beginning CBSE schools were chosen from urban Vadodara and Hyderabad city. Then children in desired age group were considered for data collection. Principal and class teacher were coordinated, according to their willingness and feasibility. Consent forms were sent to parents through the class teachers. Children whose primary caregivers gave consent to be part of the study were considered for data collection.

All the subjects included in this study on the basis of following inclusion criteria.

- **Inclusion criteria:**

1   Children aged eight to ten years and their primary care givers were selected for the study.

2   Children were selected from English Medium CBSE Schools.

3   Children and their primary care givers selected for the study were from Hyderabad urban area and Vadodara urban area.

4   Educated primary care givers were selected as language of questionnaire is English, individual who can speak, write and read English fluently were taken into the sample.

The sample has been selected from Hyderabad and Vadodara city. Then sample were selected on the basis of the child education, and residential mobility.

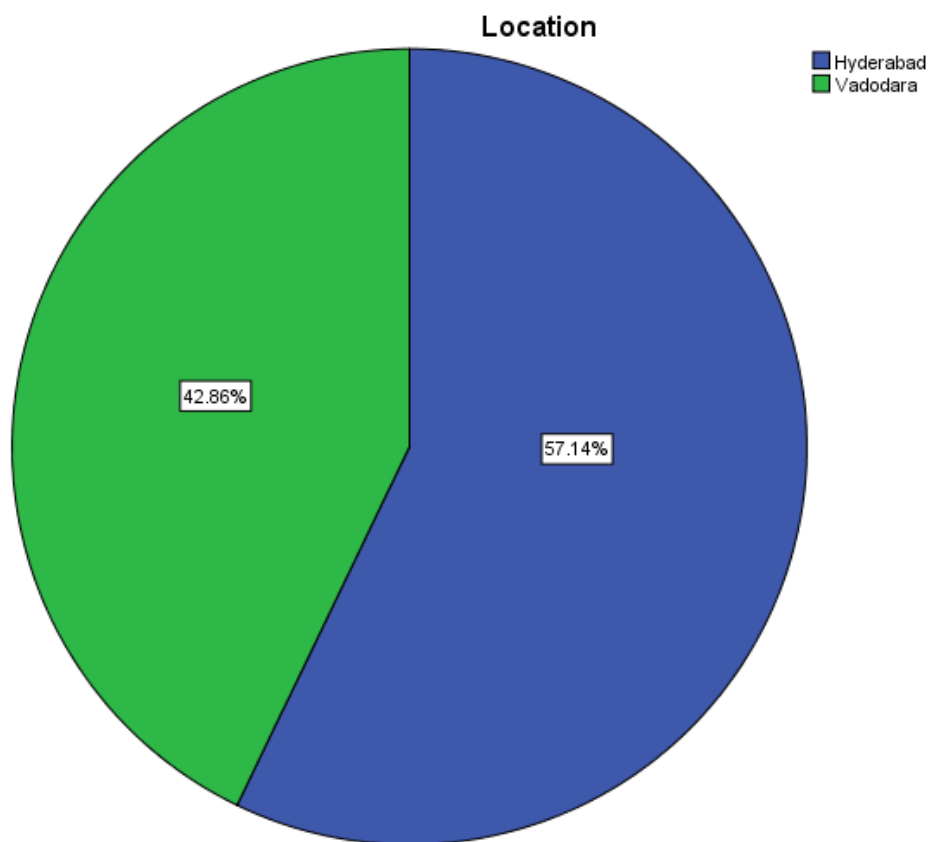*Figure 1* **Sample breakup based on location**

Figure 1 This Pie Chart represents the Sample breakup of the research. The 57.14% of sample taken from Hyderabad while 42.86% of sample is taken from Vadodara.

Table No. 2.1.2 *Sample Breakup For Phase One*.

Hyderabad				Vadodara			
Parents N=172		Children N=172		Parents N=129		Children N=129	
Local	Mobile	Local	Residential mobile	Local	Residential mobile	Local	Residential mobile
121	51	121	51	91	38	91	38

The above table indicates the total number of parents and their children participated from Hyderabad and Vadoadra city. There were 121 local primary care givers and their children from Hyderabad out of 172 parent child dyads and 51 residential mobile primary care givers and their children who participated.whereas there were 91 local primary care givers and their children from Vadodara out of 129 parent child dyads and 38 residential mobile primary care givers and their children who participated.

Table 2.1.3 *Sample Break Up Of Children's Age*

Age group	Hyderabad			Vadodara		
	Local children	Residential mobile children	Total	Local children	Residential mobile children	Total
7 to 8	47% (81)	16% (29)		33% (43)	7% (9)	
9 to 11 yrs.	23% (40)	12% (22)		37 % (48)	23% (30)	
Total	70% (121)	30% (51)	172	70% (91)	30 % (38)	129

The above table indicates 47% local children and 16% residential mobile children who participated in Hyderabad were 7 to 8 years age group. While 23 % local children and 12 % residential mobile children in Hyderabad were nine, ten and eleven years old.

In Vadodara sample of 33% local children and 7% residential mobile children were 7 to 8 years old. While 37 % local children and 23 % residential mobile children were nine, ten and eleven years old.

Table 2.1.4 *Sample Breakup Of Father's Age*

Age group	Hyderabad			Vadodara		
	Local fathers	Residential mobile fathers	Total	Local fathers	Residential mobile fathers	Tota
30-40 yrs.	50% (87)	23% (40)		37% (48)	13% (17)	
40-50 yrs.	19% (33)	7% (11)		33% (43)	16% (21)	
50 and above	0.85% (1)					
Total	**121**	**51**	**172**	**91**	**38**	**129**

The above table indicates that fathers who participated in the research were in age range of thirty to fifty years. Hyderabad sample consist of 50% local and 23% residential mobile fathers were 30 to 40 years group. 19% local and 7% residential mobile fathers were 40 to 50 years group, and one father was in 50 to 60 years group.

Vadodara sample consisted of 37% local and 13% residential mobile fathers were 30 to 40 years group, 33% local and 16% residential mobile fathers were 40 to 50 years group.

Table 2.1.5. *Sample Break Up Of Father's Education*

Education	Hyderabad			Vadodara		
	Local fathers	Residential mobile fathers	Total	Local fathers	Residential mobile fathers	Total
SSC	2.3% (4)	1% (2)		3% (4)	3% (4)	
Graduate	25% (43)	10% (17)		42% (54)	16% (21)	
Postgraduate	43% (74)	18% (32)		25% (33)	11% (13)	
Total	121	51	172	91	38	129

Fathers who participated in the research were in three categories of education, SSC, graduate and post graduate. In Hyderabad sample 2.3% local father and 1% residential mobile father were SSC, 25 % local and 10% residential mobile fathers were graduate, and 43% local and 18% residential mobile fathers were postgraduate. In Vadodara sample 3% local father and 3% residential mobile father were SSC, 42 % local and 16% residential mobile fathers were graduate, and 25% local and 11% residential mobile fathers were postgraduate.

Table no.2.1.6 *Sample Break Up Of Father's Occupation*

Fathers occupation	Hyderabad			Vadodara		
	Local	Residential mobile	Total	Local	Residential mobile	Total
Service	58% (100)	26% (45)		31% (41)	28% (36)	
Self employed	9% (15)	5% (6)		12% (15)	2% (2)	
Business	3% (6)			25% (32)		
Total	**121**	**51**	**172**	**91**	**38**	**129**

Fathers, who participated in the research were in three categories of occupations, service, self emplyed and business. In Hyderabad sample 58% local father and 26% residential mobile father were in service, 9% local and 5% residential mobile fathers were self employed, and 3% local fathers were having business. In Vadodara sample 31% local father and 28% residential mobile father were service, 12 % local and 2% residential mobile fathers were self employed, and 25% local fathers were having business.

Table no. 2.1.7 *Sample Break Up Of Mother's Age.*

Age group	Hyderabad			Vadodara		
	Local mothers	Residential mobile mothers	Total	Local mothers	Residential mobile mothers	Total
25-35 yrs.	44% (75)	19% (32)		26% (35)	13% (17)	
35-45 yrs.	26% (46)	10% (18)		43% (55)	17% (21)	
45 and above		1% (1)		1% (1)		
Total	**121**	**51**	**172**	**91**	**38**	**129**

The above table indicates that mothers who participated in the research were in age range of twenty-five to forty-five years. Hyderabad sample consisted of 44% local and 19% residential mobile mothers in 25 to 35 years age group, 26% local and 10% residential mobile mothers in 35 to 45 years age group, and one mother was in 45 and above years age group.

Vadodara sample consist of 26 % local and 13% residential mobile mothers in 25 to 35 years age group, 43% local and 17% residential mobile mothers were in 35 to 45 years age group.

Table no. 2.1.8 *Sample Breakup Of Mothers Education*

Education	Hyderabad			Vadodara		
	Local mothers	Residential mobile mothers	Total	Local mothers	Residential mobile mothers	Total
SSC	5% (9)	1% (1)		10% (9)	7% (9)	
Graduate	27% (47)	15% (26)		40% (51)	12% (16)	
Post graduate	38% (65)	14% (24)		20% (28)	11% (14)	
Total	**121**	**51**	**172**	**91**	**38**	**129**

Mothers, who participated in the research were in three categories of education, SSC, graduate and post graduate. In Hyderabad sample 5% local mothers and 1% residential mobile mothers were SSC, 27 % local and 15% residential mobile mothers were graduate, and 38% local and 14% residential mobile mothers were postgraduate. In Vadodara sample 10% local mothers and 7% residential mobile mothers were SSC, 40 % local and 12% residential mobile mothers were graduate, and 20% local and 11% residential mobile mothers were postgraduate.

Table no.2.1.9 *Sample Breakup Of Mothers Occupation*.

Occupation	Hyderabad			Vadodara		
	Local mothers	Residential mobile mothers	Total	Local mothers	Residential mobile mothers	Total
Service	20 % (34)	11% (18)		12% (15)	5% (6)	
Profession	7% (12)	1% (2)		15% (20)	-	
Housewife	43% (75)	18% (31)		43% (56)	25% (33)	
Total	**121**	**51**	**172**	**91**	**38**	**129**

Mothers who participated in the research were in three categories of occupations, service, self employed and business. In Hyderabad sample 20% local and 11% residential mobile mother were in service, 7% local and 1% residential mobile mothers were self employed, and 43% local and 18% residential mobile mothers were housewives. In Vadodara sample 12% local mothers and 5% residential mobile mothers were in service, 15 % local mothers were self employed, and 43% local and 25% were housewives.

2.3   TOOLS OF MEASUREMENT:

The measures used for the study were compiled in the form of a questionnaire.

- **Parents' Consent Form** – In the beginning, once the school were convinced about participation in the research, parents of 3rd and 4th grade students were given parents consent form. On consent form it was written that, "I consent to __ (student full name) participation in the research at XYZ School. I understand that participation in this project is voluntary. I accord permission for myself and my daughter/son to be a participant in the research." As only willing participant were taken in research.

- **Demographic Information**

  The intake sheet consists of demographic details such as name of child, name of mother, name of father , age of child, age of mother, age of father, education of child, education of mother, education of father, occupation details of parents and contact details of parents and years of living in current city (Hyderabad and Vadodara).

- **Multidimensional Self Report Emotional Intelligence Scale**

  The Multidimensional Emotional Intelligence Scale is used to measure the emotional intelligence of the primary care giver's. Emotional intelligence (EI) can be defined as the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to

guide thinking and behavior. This tool is constructed by Rakesh Pandey and Tulika Anand in 2008. They have developed a self report measure of EI and standardized it on an Indian sample. The scale is available in both Hindi and English. It is a 51 item questionnaire based on the Mayer and Salovey's 1997 revised model of EI and measure four dimensions of EI. The four dimension of EI are:

1. *Perception, appraisal and expression of emotion*: The core capacities are identifying feelings and thoughts through proper and appropriate words in self as well as in others, and discriminating between real and fake expressions.

2. *Emotional facilitation of thinking*: The core abilities are using emotions in thinking by giving proper attention to information available. It includes emotional facilitation to be optimistic and creative.

3. *Understanding and analyzing emotion*: The core capacities are to understand and identify complex emotions and its consequences.

4. *Reflective regulation of emotion to promote emotional and intellectual growth:* The core capacities are to stay open to feelings including pleasant and unpleasant. Ability to manage emotion in oneself and others by moderating negative emotions and enhancing pleasant ones, without repressing information.

The Alpha co-efficient of scale was .92, which says it is highly consistent and reliable. The scale was validated against both internal and external criteria.

Table 2.3.1 *Dimensions Of Emotional Intelligence Scale*

EI Dimension	Total number of items	Possible range of scores	Reliability cronbach's alpha coefficient
Ability to express and appraise emotions	17	1-102	.84
Ability to utilize emotion	15	1-90	.83
Ability to manage emotion	11	1-66	.73
Ability to manage emotion in other	8	1-48	.73
Full Scale	51	1-306	.92

- **Children's Attribution Style Questionnaire**

The Children's Attribution Style Questionnaire (CASQ; Seligman et al., 1984) is used to study attribution style in children aged eight to thirteen. The CASQ includes 48 self rated items divided equally between positive events called CASQ-P ('you get an 'A'' on a test') and negative events called CASQ- N ('you break a glass'). The alpha reliabilities range from 0.53 to 0.60 for the CASQ-P and from 0.45 to 0.46 for the CASQ-N test–retest reliabilities over periods of 3–12 months ranging from 0.61 to 0.35. The scale uses both a forced choice and a dimensional approach. Respondents select between two possible causes for the event, and each option represents the presence or absence of one attribution dimension (for example, an internal or

external cause). Attributions for each dimension are computed by summing the number of internal, stable, or global responses. It is used for measuring explanatory style of children. Explanatory style is a psychological attribute that indicates how people explain to themselves why do they experience a particular event, either positive or negative. It has two dimensions –The individual good event dimension and individual bad event dimension. The individual good event dimension measures pervasive good event (PVG), permanent good event (PMG) and personal good event (PSG). The individual bad event dimension measures permanent bad event (PMB), pervasive bad event (PVB) and personal bad event. Three 'P' components in explanatory style are as below:

(a) *Personal. (Internal vs. External.)* This involves how one explains ,where does the cause of an event arises. People experiencing events may see themselves as the cause; that is, they have internalized the cause for the event.

(b) *Permanent. (Stable vs. Unstable.)* This involves how one explains the extent of the cause. People may see the situation as unchangeable.

(c) *Pervasive. (Global vs. Local/Specific.)* This involves how one explains the extent of the effects. People may see the situation as affecting all aspects of life.

Children's attribution style is also known as optimism. The present study using optimism and optimist attribution style as synonyms.

- **The School Social Behavior Scale**

The School Social Behavior Scales, Second edition (Merrell, 2002) is a school based social behavior rating scale for use by teachers and other school personnel in assessing social competence and antisocial problem behavior of students in kindergarten through grade 12. It includes two separate scales with a total of 64 items that describe positive and negative social behavior that commonly occur in educational settings. Items are rated using 5- point scale. The two subscales have three dimesnions each, with scores reported as four different social functioning levels, including high functioning; Average, at risk and high risk.

Scale A, social competence subscale, includes 32 items that describe adaptive, pro social behavioral competencies, the interpersonal skills subscale and self management skills subscales as they commonly occur in educational settings. Scale B, antisocial behavior subscale, includes 32 items that describe problematic behaviors that are other directed in nature or are likely to lead to negative social consequences. It includes 32 item, hostile-irritable subscale, antisocial aggressive subscale and disruptive demanding subscale.

The scale internal consistency and split half reliability co-efficient range from .91 to .98. The scale has strong convergent and discriminate construct validity.

Table 2.3.2 *Details Of School Social Behavior Scale*

SSBS Scale	Subscales	Total number of items	Test Retest Reliability
Scale A: Social Competence Scale	Interpersonal Skills	14	0.8 to 0.83
	Self management Skills	10	
	Academic Skills	8	
Scale B: Antisocial Scale	Hostile Irritable	14	0.60 to 0.73
	Antisocial Aggressive	10	
	Disruptive demanding	8	
Total		**64**	

- **Social Exercise Checklist: structured protocol for rating of parent child interaction** - Apart from the survey researcher has designed social exercise session to supplement the information gathered through the questionnaire. The purpose is to observe parents child relationship and interaction and to relate it with the emotional intelligence of primary care. Social exercise is designed to relate with dimensions of emotional intelligence. Four dimensions of emotional intelligence are appraise and express emotion, understand emotion, manage emotion in self and mange emotion in others. It consist of three parts 21 observation criteria, two questions on stress management and field notes, the specific and salient patterns of interaction among dyads noted by the observer (only in case of noticeably different patterns).

2.4   PROCEDURE:

The main objective of the research is to study the relationship of emotional intelligence of primary care giver's and optimism and social competence of their children. To fulfill this objective following procedure was used.

Phase one: The study was initialized by obtaining school permission to carry out the research. Once school has given permission to contact parents for the research purpose; Parents Consent letter were sent to parents of third and forth standard (Parents consent letter given in Silver Oak School, Hyderabad is 300, Sentia School 100, Vikas School 100, DPS, Vadodara 500, and Billabong School 80, Central School Vadodara 280).   Parents who gave consent (Silver oak School 200 Sentia School 50, Vikas School 42, DPS 75, Billabong School 25, and Central School 50) with their children were selected.

Primary care givers were asked to fill intake sheet and multidimensional self report emotional intelligence scale.The school social behavior scale was rated by the class teacher of concerned child. Children's attribution style questionaire was self rated by children themselves. Collected the set of intake sheet, parents questionnaire, children attribution scale and school social behavior scale about the child.

Phase two: After collecting the data from the school. The researcher took the upper and lower range of scores obtained by the primary care givers. Primary care givers who have scored above and lower quartile range were called for the '*Workshop on Social Competence and Optimism of Children''*. The objective of workshop is to supplement the data gathered through the questionnaire.

***Observation procedure for social exercise*:** To supplement the quantities data collected through questionnaire researcher decided to assess the parent child relationship through qualitative assessment procedure. Thus social exercise was designed where in parent child interaction can be observed and assessed. The purpose of the social exercise is to observe the parent child interaction and parent child relationship which reflects the emotional intelligence parenting. The four dimensions of emotional intelligence are perception of emotion, understanding emotion, emotional expression, emotional regulation and relationship of primary care givers with their children were assessed through the exercise. The observation protocol was prepared following these four parameters. The researcher designed a workshop where the parent and child dyads will took part in the exercise following which; researcher presented a session of good parenting, wherein she provided specific feedback to parents. Parents who agreed to come for the workshop were given a specific time by researcher where the parent child dyad observation was done one by one.

The parent child dyads were asked to solve the puzzle together. It was 3D cardboard mini architecture puzzle by Annie for 8+ children. Children were asked to make shapes of different architectural design from those cardboard pieces with the help of instruction given with the game. Children were also asked to seek help if required from the parents. Children were given 20 min to solve the puzzle. A pre-prepared social exercise checklist was scored based on the researcher's observation parent

child interaction. Additionally, the researcher took field notes of the specific and salient patterns of interaction among dyads (only in case of noticeably different patterns). Also, parents responded to two questions about their stress reducing activities.

2.5   PLAN OF ANALYSIS:

The data of emotional intelligence of primary care givers, optimism of children, and social competency of children were coded for quantitative analysis. Subjective questionnaire of parents and observation of primary care giver's - child dyads were coded for qualitative analysis. The coded data were then copied in SPSS for Statistical analysis.