CHAPTER III

RESEARH METHODOLOGY

This Descriptive research focused on the following steps:

1. Population and Sample
2. Research Instrument
3. Data Collection
4. Data Analysis

Population and Sample

Population

The target population of this study was the urban primary school student's parents. There were 68 urban primary schools which included both the public and private primary schools with 32,180 students [13]. The researcher wanted to select such a population where parents and families have relatively wider understanding about the parent and family involvement in their child's academic activities. Moreover, the rural primary school children's parents and family's have low level of literacy or education than the urban primary school children's parents and families. On the other hand, level of parent and family involvement in school might be low and lesser in higher secondary schools and college level.

Sample

The samples were the urban school student's parents. The Sample size was determined through the use of Krejcie and Morgan [67] table for determining the sample size. According to this formula, sample size of 408 was selected for the population of 32,180 students studying in 68 urban primary schools of Bhutan in 2013. Multistage sampling method was used for randomizing the sample size for the study and the following processes were followed;

Stage I: Selecting of Province (Districts)

There are 16 provinces (districts) with urban primary schools in Bhutan. The provinces are grouped under four regions; West, East, Central and South. 9 provinces (districts) were selected from regions by cluster sampling method. The province (districts) in each region was allocated by 50% proportionate. The table number 1 given below shows the details of population and sample size selected for province from each region.

Table 1 Details of Population and Sample Size selected of Provinces (Districts) from Region

Region	Population(province)	Sample selected
West	5	3
Central	2	1
South	3	2
East	6	3
Total	**16 provinces (districts)**	**9 provinces (districts)**

Stage II: Selecting of schools from provinces (districts)

At the second stage, schools were selected from selected provinces. There are 68 urban primary schools. Of 68 urban primary schools, 34 schools were selected from 9 provinces (districts) by stratified random sampling. The school in each provinces (districts) and regions were allocated by 50 percent proportionate. However, the researcher has not applied the 50 % proportion allocation in all the provinces as there are difficult in getting allocated number of parents in some schools of province. The table number 2 shows the details of selected schools from each province.

Table 2 Details of Population and Sample Size selected of Schools from each Regions and Province (District)

Region	Provinces (districts)	Number of schools (population)	Sample selected
West	Paro	10	5
	Thimphu	24	14
	Punakha	1	1
	Total	**25**	**20**
Central	Bumthang	3	2
	Total	**3**	**2**
South	Sarpang	5	3
	Chukha	5	4
	Total	**10**	**7**
East	Mongar	2	2
	Trashigang	3	1
	SamdrupJongkhar	5	2
	Total	**10**	5
	Total	**48 schools**	**34 schools**

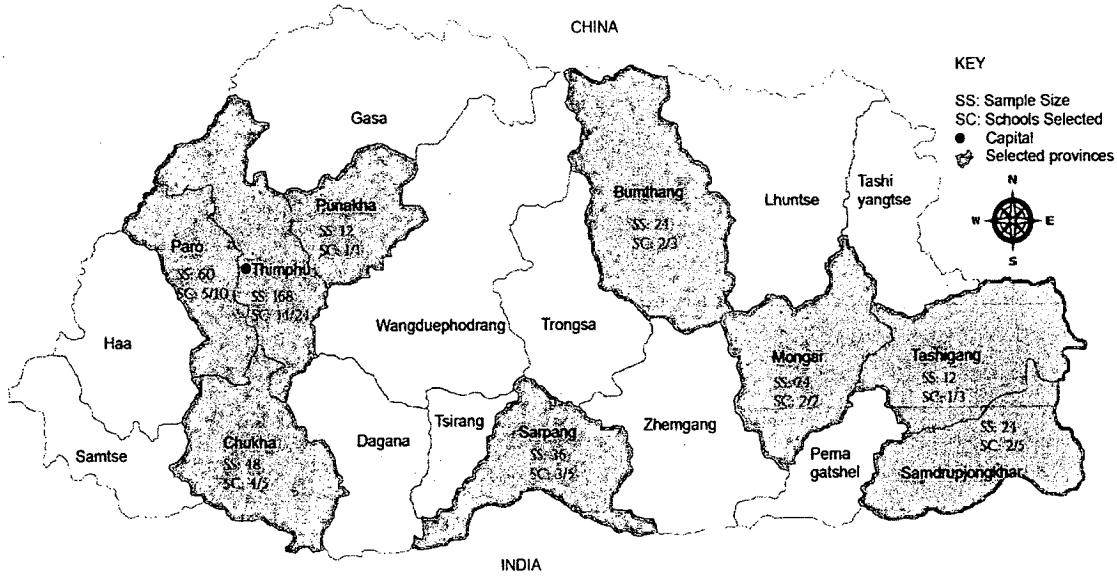

Figure 3 Map of Bhutan showing Sample Size and Data collection Provinces

Stage III: Selecting of Parents

The final stage was selecting parents from 34 schools. The parents were selected by Quota Sampling method. The total sample size of 408 was allocated proportionately among the selected 34 selected urban primary schools. This gives a sample of 12 parents for each school. The final 12 sample units were then distributed 2 each among 6 grade levels, Grade I through VI. Therefore, selecting two children will mean administering questionnaire for two parents in each grade level (grade level I to VI of 2014 academic session). The questionnaires were sent through the school children whereby the parents will fill up the questions. In case of double selection of student from school, the re-selection of student was done. The survey was structured in this manner since it was the best and simplest method to avoid double selection of students from school to enable contact with parents.

Research Instrument

1. Characteristics of Research Instrument

The research instrument that was used in this study was questionnaire from literature review of parent and family involvement dimensions in school.

The characteristics of research instrument consist of questionnaires which were divided into two following parts; Part I was demographic data of respondents and existing data of individual student's academic performance in average percentage which was collected by researcher from respective school.

Part II was survey questionnaire on six factors of parent and family involvement in school, which was distributed to parents and families.

Part I: This part consists of Demographic data of respondents (Marital Status, Income and Educational qualification) and existing data of an individual student academic performance which was collected from 34 selected schools with approval from the concern principals. The academic performance was maintained in Average percentage for individual students in their academic result of 2013. The researcher made visit to the school and collected the data from school office.

Part II: This part consist 30 measures of survey questionnaire for six factors of parent and family involvement in school through parenting, communication, volunteering, learning at home, decision making, and collaboration-with-community. The 30-measures survey asked parents and families to rate their involvement in child's learning. Parents and families rate each of the 30 measures using a five response Likert scale ranging from Strongly Agree (5), Agree (4), Moderate (3), Disagree (2), and Strongly Disagree (1).

2. Research Instrument Construction and Quality

The following Specific steps were followed in the construction of the research instrument as follows:

2.1 Construction of Research Instrument

2.1.1 Literature review of Epstein's six types of parent and family involvement dimensions in school was referred to construct the research instrument.

2.1.2 Define the terms from Epstein's six types of parent and family involvement dimensions.

2.1.3 Constructed 30 measures of questionnaires on parent and family involvement from six dimensions.

2.2 Measuring the Quality Research Instrument

2.2.1 The content Validity was approved through consultation process with advisors who reviewed and made recommendations on the research instrument developed by the researcher.

2.2.2 The research instrument was reviewed for the validity by experts and calculating the Item Objective Congruence (IOC) based on experts rating

Expert I: Assistant Professor Dr.Deki C Gyamtso, Lecturer of Education, Samste College of Education, Bhutan

Expert II: Associate Professor Dr.Nipon Kinawong, External Expert, Faculty of Education, Naresuan University

Expert III: Associate Professor Dr.Vithaya Jansila, Lecturer of Educational Administration, Faculty of Education, Naresuan University, Thailand

Expert IV: Assistant Professor Dr.Aumporn Lincharearn, Lecturer of Educational research and Evaluation, Faculty of Education, Naresuan University, Thailand

Expert V: Associate Professor Dr.Chalong Chatruprachewin, Lecturer of Educational Administration, Faculty of Education, Naresuan University,

2.2.3 Selected the measures of the questionnaires which have Item Objective Congruence (IOC) of >0.5. All the measures were identified in 1 value by experts.

2.2.4 After the expert's recommendations, the questionnaires were checked for reliability test to 30 parents who are not in sample. Cronbach's α (alpha) reliability coefficient was calculated at .928 which indicated greater internal consistency of items (Variables) in the scale. This was done before actual survey and found the reliability coefficient

2.2.5 Completed the questionnaire for collecting data.

Data Collection

The researcher collected data by distributing 408 questionnaires to urban student's parents. A sample was drawn from the target population of students studying in 34 urban primary schools which included both public and private primary schools of Bhutan in 2014. Therefore, data was collected from 34 selected sample schools from 9 districts under 4 regions. For the student academic performance, the existing data for student academic achievement result of 2013 recorded by respective schools in average percentage was collected and used with approval from respective school principal.

Data Analysis

After data collection, the following procedure of data analysis was operated through SPSS program

1. To identify the factors of parent and family involvement in school, Six factors of family involvement were identified from Epstein's model namely, parenting, communication, volunteering, learning at home, decision making and collaboration with community. The Mean ($\bar{X}$) and Standard Deviation (SD) of parent and family level of agreement on six factors of parent and family involvement was analyzed with reference to 5-point rating scale, which was divided into 5 equal ranges [69].

4.50-5.00	are considered Very High
3.50-4.49	are considered High
2.50-3.49	are considered Neutral
1.50-2.49	are considered Low
1.00-1.49	are considered Very Low

The Student academic performance of 2013 which is the average percentage was also analyzed using Mean ($\bar{X}$) and Standard Deviation (SD)

2. To study the Multiple relationship between the six factors of parent and family involvement in school and student academic performance in the urban primary schools of Bhutan, the Pearson Product Moment Correlation Coefficient and Multiple regression enter method was analyzed by using sum of raw score of each parent and family perception on factors of parental and family involvement (range of raw score

The Correlation coefficient range of *r* is from -1.0 to +1.0. The sign of the correlation coefficient indicates the direction of the relationship. The absolute value of the correlation coefficient indicates the strength of the relationship. The greater the absolute value, the stronger the relationship. The table below explains the range of values that can be used as a guide or rule of thumb for interpreting the magnitude of correlation coefficients [68].

.09 to 1.00	(-.90 to-1.00)	Very high positive (negative) correlation
.70 to .90	(-.70 to-.90)	High positive (negative) correlation
.50 to .70	(-.50 to-.70)	Moderate positive (negative) correlation
.30 to .50	(-.30 to-.50)	Low positive (negative) correlation
.00 to .30	(-.00 to .30)	little if any correlation

3. To construct the best predictive equation to predict student academic performance by using the six factors of parent and family involvement in urban primary schools of Bhutan, all the six factors (parenting (X_1), communication (X_2), volunteering (X_3), learning at home (X_4), decision making (X_5) and collaboration with community (X_6) was analyzed using the multiple regression stepwise method.