

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodological procedures used to answer the research questions of this study. The following subjects are discussed in this chapter: research design, research participant selection and sampling, instrumentation, the validity and reliability of the instruments, data collection procedures, and data analysis procedures.

3.2 Research Design

This study employed a mixed methods research design. Researchers have the freedom to select the methods and procedures of research that they prefer. However, researchers are expected to state the reasons of choosing a particular method over other methods. Furthermore, the selected methodology must be consistent with the purpose of the study and match the problem of the study “The selection of a research approach is also based on the nature of the research problem or issue being addressed, the researchers’ personal experiences, and the audiences for the study” (Creswell, 2014; 31). Furthermore, researchers should consider in terms of balancing the benefits of the method against the increased resources and skills required “Just because you can collect both numerical and narrative data in relation to a single research problem, this does not mean that you should undertake a mixed methods study (Halcomb & Hickman, 2015).

Many studies conducted on parental involvement have used single method research design. For instance, studies that focused on the effects of parent involvement on children’s achievement used quantitative research design, while studies that examined the practices of parents and schools in building positive partnerships used qualitative design (Jordan et

al., 2001). Moreover, Fan and Chen (1999), based on the analysis they made on the literature of parent involvement, they found that most proportion of the literature is qualitative.

Recognizing that all methods have limitation and depending on one data source is insufficient, a mixed method design is useful to diminish and to overcome the weaknesses and the limitations of single research approach and to develop a stronger understanding of the research problem or questions (Creswell, 2014). Sami Almalki (2016) argues that mixed methods is suitable to any research project as using mixed methods provides a greater depth breadth information which is not possible to obtain in using singular approach (Sami Almalki, 2016). According to Hlacomb and Hickman (2015) researchers need to use mixed methods design to address complex issues in research projects.

Furthermore, the nature of this study requires the use of both quantitative and qualitative research methods. Nderu (2005) conducted a study in United States about the involvement of Somali parents in their children's education. He believed that interview is the best method for collecting data from marginalized populations who often feel that their voices are not heard. It is the researchers' belief that the same description applies to the participants of this study and in many cases; the participants in Somalia might be more marginalized. On top of that, individual interview is a suitable method to examine sensitive topics such as the parental involvement. For instance, parents may not want to share in a focus group interview their lack of involvement in their children's education. Hence, individual interview was used to collect data for the qualitative part of this study (Nderu, 2005).

Besides the qualitative data, this study also requires the use of quantitative method to investigate the perceptions of parents and teachers about schools' partnership practices for

parental involvement. Moreover, this design was used to determine the relationship between the level of parental involvement and schools' partnership practices for parental involvement. Since this study examines parents' and teachers' perceptions about parent involvement, survey was used to collect data for the quantitative part of this study. Fink (2003) states that quantitative design enables researchers to collect extensive attitudinal and behavioral data and compare the relationship between variables. According to Burton and Streane (2004, p. 145) "One of the most common methods of data collection in the social science is a survey". Similarly, Patten (2000) claims that survey design is appropriate to measure behaviors, beliefs or attitudes of subjects in non-experimental studies.

Beside surveys and interviews, there are other methods of data collection, which could not be used in this study. One of these methods is to depend on external sources of information that can provide records of parental involvement such as number of hours parents spent volunteering at school, attendance at parent teacher conferences, and number of hours spent by parents in helping children to complete homework. Nevertheless, such information provider does not exist currently in the education system of Somalia. This is because schools that were established after the collapse of the central government of Somalia in 1991 are run by local communities and lack many important factors to fully function. Observation is another possible method for collecting data in social science, but it was not considered a reliable method for assessing parental involvement behaviors. According to Peterson observation has many disadvantages "The use of observation comes with its own set of challenges and limitations. In addition to its associated costs, observation generally cannot provide a measure of many important parenting behaviors" (Peterson, et al., 2002, 8).

Based on these facts, mixed method is one of the most common methods used by researchers when conducting studies about parental involvement. For instance, Stout (2009) conducted a study entitled “Comparing Rural Parent and Teacher Perspectives of Parental Involvement: A Mixed Methods Study”. The main aim of his study was to identify and compare the different perspectives of parents and teachers on parental involvement. Stout used mixed methods to collect and analyze data.

Therefore, this study used two surveys and interview questions to collect data. The first survey was developed by Epstein and Salinas (1993) and was given a title of School-Family-Community Partnerships Survey. The second survey was also developed by Epstein and Salinas (1993) and entitled School and Family Partnerships Survey.

Initially, the researcher intended to conduct quantitative research design as it is an easy method for validating and generalizing. However, relying on only quantitative data was considered insufficient to provide deeper understanding of the issues and the problems that this study addresses. Therefore, this study was conducted in two separate phases. The researcher started conducting quantitative research prior to the collection and analysis of the quantitative data. The purpose of the qualitative part is to explain in more depth the quantitative significant or non-significant results. The quantitative part of this study was conducted before the qualitative part, as one of the objectives of this study was to identify the different perceptions of parents and teachers towards parental involvement, which can be obtained through quantitative data (surveys). Moreover, the researcher was aiming to know the reasons of the different ratings (high/low) which can be obtained through qualitative data (interview). Therefore, the quantitative data was collected firstly to identify the different ratings of teachers and parents. Then qualitative data was collected to provide

more explanations and to know why a particular group rated higher than the other group. Roshan and Rajshree (2009) provided the following example to illustrate the different purposes of qualitative and quantitative analysis:

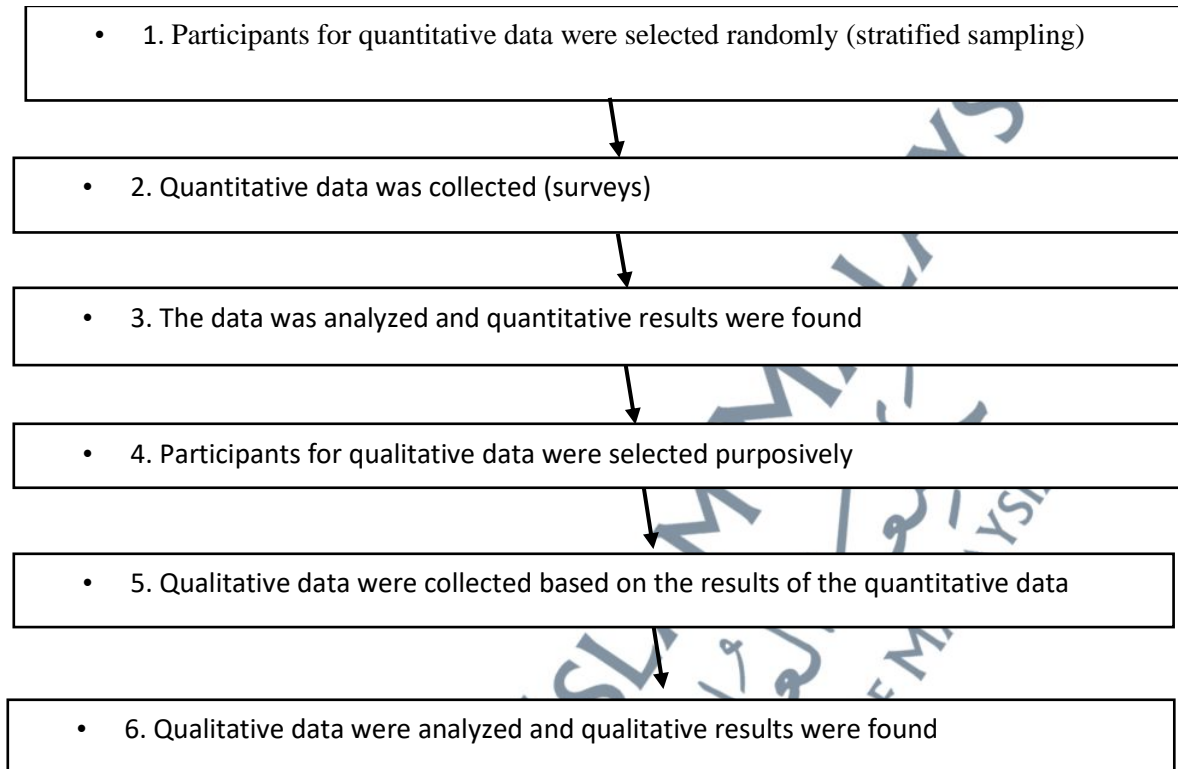
A car manufacturer wants to determine which car model yields highest sales for the last three years. Descriptive statistics (Quantitative analysis) can be used to show graphically the sales figures for the different models and the firm may decide to increase production of the model yielding highest returns. However, if the car manufacturer wanted to know why the sales figure is higher for a particular model and the reasons why people prefer to buy this car model, then information gathered through interviews, surveys and other methods will be analyzed (Qualitative analysis). (Roshan & Rajshree, 2009:1)

This order of conducting mixed methods is known as “explanatory sequential mixed methods design”. According to Creswell (2014) this design involves two-phase project in which researchers collect quantitative data and analyze the data in the first phase and then use the quantitative results as basis on which to build the second qualitative phase. Therefore, the quantitative results decides the type of participants and the questions that will be asked for the qualitative phase. This design is preferred by individuals with strong quantitative orientation or those who are still learning qualitative techniques.

3.2.1 The procedures of the mixed methods for this study

This study was conducted in two phases. The following diagram shows the steps taken for the two phases.

Figure 3. 1 Procedures of the mixed methods



3.3 Population

The target population for this study is all full-time teachers and parents of students studying in primary schools under one private organization in Somalia. Full-time teachers were selected in this study as they spend more time in the school than part-time teachers therefore, full-time teachers can have more information about the school including the involvement of their students' parents in education.

Primary schools were selected because parental involvement in secondary school is not as high as in primary school. This is because the higher the students progress in education, the more challenges their parents have to face in supporting them, particularly for those with limited education (Abdul Diriye, 2006).

Moreover, some parents believe that when children are in secondary school they can support themselves for their education (Klein, 1990). Therefore, examining parental involvement in secondary and primary should be separated as different research concerns. The current study, the researcher is interested to investigate parental involvement in primary schools and hopefully future studies can focus on parental involvement in secondary schools in Somalia.

Previously, the researcher was planning to conduct this study in public schools in Somalia. In 2013, the government of Somalia, particularly the Minister of Human Development and Public Service, in collaboration with UNICEF, came up with an initiative called Go-2-School (2013-2016) to provide free education to one million children who are out-of-school. The researcher was interested to study these schools and contacted the educational officers in Somalia, such as the Minister of Education and UNICEF. The researcher received responses from both the Minister of Education of Somalia, as well as UNICEF, and they promised to provide the information of the schools under this initiative. Communication with these officers are provided in Appendix (J). However, before the researcher even started with data collection, the whole program had collapsed.

With no public schools in Somalia to study, the researcher decided to select schools from one of the private education networks in Somalia called Formal Private Educations Network in Somalia (FPENS). The communication made with the FPEN officers and their responses are attached in the appendix. Schools under this private organization are located in different cities in Somalia. However, it was not safe to move from one city to another as conflicts were still going on in Somalia. Therefore, due to the risk of movement, time constraint, and limited resources, the researcher selected ten schools from this private

organization that are located in Mogadishu; the capital city of Somalia. According to report by the Ministry of Education, Culture and Higher Education-Somalia (2011) this organization was established in 1999 to fill the gap in education caused by the collapse of the Somali state in 1991.

The schools chosen are located Mugadishu, Benadir and they are the following ten schools; 1. Al-Najah Primary School: is located Mugadishu, Benadir. 2. Ma'alim Jama Primary School: is located Mugadishu, Benadir. 3. Daalo Primary School: is located Mugadishu, Benadir. 4. Al-Rayan Primary School: is located Mugadishu, Benadir. 5. Al-Jamhurye Primary School is located Mugadishu, Benadir. 6. Ahmed Gurey: is located Mugadishu, Benadir. 7. Mahamud Harbi: is located Mugadishu, Benadir. 8. Imaamu Shafie School: is located Mugadishu, Benadir. 9. Usama Ibnu Zayd: is located Mugadishu, Benadir. 10. Suweys Primary School: is located Mugadishu, Benadir.

3.4 Sampling and Sample Size for the Quantitative Part

The total number of teachers of the selected schools is 486 teachers and the number of students in the selected schools is 20278 students. To determine the sample size for teachers, as well as for parents, the researcher uses the table which was developed by Krecie and Morgan (1970) for determining the sample size. According to this table the sample size for a population between 486 to 500 is 214. While a population between 20000 participants to 30000 participants is 377. The guidelines are shown in Table 3.1.

Table 3.1 .Krecie and Morgan (1970) sample size guidelines

	N	S	N	S	N	S	N	S	N
338	2800	260	800	162	280	80	100	10	10
341	3000	265	850	165	290	86	110	14	15
246	3500	269	900	169	300	92	120	19	20
351	4000	274	950	175	320	97	130	24	25
351	4500	278	1000	181	340	103	140	28	30

	N	S	N	S	N	S	N	S	N
357	5000	285	1100	186	360	108	150	32	35
361	6000	291	1200	191	380	113	160	36	40
364	7000	297	1300	196	400	118	170	40	45
367	8000	302	1400	201	420	123	180	44	50
368	9000	306	1500	205	440	127	190	48	55
373	10000	310	1600	210	460	132	200	52	60
375	15000	313	1700	214	480	136	210	56	65
377	20000	317	1800	217	500	140	220	59	70
379	30000	320	1900	225	550	144	230	63	75
380	40000	322	2000	234	600	148	240	66	80
381	50000	327	2200	242	650	152	250	70	85
382	75000	331	2400	248	700	155	260	73	90
384	100000	335	2600	256	750	159	270	76	95

Note: "N" is the population size. "S" is the sample size: Krecie and Morgan (1970)

Thus, 214 teachers as participants and 377 parents were selected. Schools under this private organization vary in the number of teachers and students. Some schools have more students and teachers than others. Stratified sampling also known as proportional random sampling was used to determine the number of participants from each school. This technique enables the researcher to improve the representativeness of participants by selecting more participants from the schools that have more teachers and students. Tables 3.2 and 3.3 below show the number of participants from each school by using stratified sampling method.

Table 3. 2 Number of Teacher Participants From Each School

Names of schools	The number of all teachers	Participants from teachers
Daalo primary school	47	21
Al-Rayaan primary school	36	16
Al-Jamhurya primary school	43	19
Ma'alın Jama primary school	33	14
Usama Ibnu Zayd	55	24
Mohamud Harbi	74	32
Imamu Shafie	81	36
Al-Najah primary school	31	14
Suweys Primary school	36	16
Ahmed Gurey	50	22

Names of schools	The number of all teachers	Participants from teachers
Total	486	214

Table 3.3 Number Of Parent Participants From Each School

Names of schools	Number of all parents	Participants from parents
Daalo primary school	2016	38
Al-Rayaan primary school	1379	26
Al-Jamhurya primary school	1698	32
Ma'alin Jama primary school	1326	25
Usama Ibnu Zayd	2387	45
Mohamud Harbi	3024	57
Imamu Shafie	3501	66
Al-Najah primary school	1008	19
Suweys Primary school	1379	26
Ahmed Gurey	2281	43
Total	20000	377

3.5 Sampling and Sample Size for the Qualitative Part

3.5.1 Sampling

This study used purposive sampling for selecting participants for the qualitative part. There is no clear guidelines of sampling strategies for mixed methods designs. According to Palys (2008), there is no one best sampling strategy rather it depends on the nature and the goal of each research (Palys, 2008). In mixed methods, researchers select their sample randomly for the quantitative part. However, the strategies of selecting interview candidates for the qualitative part is not entirely clear

Sampling strategies for quantitative methods used in mixed methods designs in implementation research are generally well-established and based on probability theory. In contrast, sampling strategies for qualitative methods in implementation studies are less explicit and often less evident. (Palinkas et al., 2015, p: 2)

Most qualitative studies do not involve big number of participants. Therefore, close attention is needed in respondent recruitment. However, having adequate socio-demographic diversity is not a critical issue “Representativeness is not the key issue in most qualitative research however: what is much more important is a willingness to participate in the study” this is because the aim of qualitative research is “to understand perceptions, processes, constraints, dilemmas and uncertainties and should not be used to infer to the wider population of similar individuals” (Coast et al., 2009, p: 10).

Bernard (2006) believes that sampling strategies depend on the kind of data needed by the researcher. According to him there are two kinds of data; cultural data and individual data. Seeking individual data, researchers seek individual information from large number of individuals who represent the population of study whom are selected randomly. However, seeking cultural data, researchers need expert informants, not randomly selected. Bernad stated the following example to explain these two kinds of data:

Think of the difference between asking someone ‘How old was your child when you first gave him an egg to eat?’ versus ‘at what age do children here first eat eggs?’ (People who are likely to really know when most mothers introduce eggs around here). (Bernard, 2006, p. 187)

Researchers are expected to clearly describe the rationale for selecting study participants (Palinkas, 2015). This is because sampling strategies are different due to the different goals of each research method. The goal of quantitative studies is to generalize from a sample to a population. (Nastasi, n.d). While the goal of qualitative research is ‘in-depth understanding’, it requires to select informed informants and not just responsive respondents (Bernard, 2006). Creswell (2008) also recommends to choose participants who

will help increase the understanding of research problem. Purposive sampling enables researchers to consider participants' knowledge, experience, availability, and willingness to participate and their ability to express their opinions.

Hence, this study used purposive sampling particularly 'stakeholder sampling' (stakeholder sampling involves the major stakeholders who are involved in designing, giving, receiving or administering the program) (Plays, 2008). Participants were selected purposefully from teachers and parents. These two groups are major stakeholders in the implementation of parental involvement according the above definition of 'stakeholder sampling'. Principals were requested to recommend participants who have more information about parental involvement and at the same time can express their knowledge about the issue.

3.5.2 Sample Size

The sample size for the qualitative part of this study is 10 participants. When determining sample size for qualitative studies, there are no specific rules neither guidelines to follow. However, there are important factors that need to be considered. Firstly, researchers need to have a sample size that will allow them to obtain enough data "the sample should be large enough to leave you with "nothing left to learn." In other words, you might conduct interviews, and after the tenth one, realize that there are no new concepts emerging". Secondly, the sample size must be large enough to represent the population of interest (Nastasi, n.d, p. 4). Thirdly, the sample size is limited by the time allocated and the resources available for data-gathering. Generally, data-gathering for qualitative studies are time consuming. Therefore, data is often collected from a smaller sample particularly when researchers are facing time constraints. The sample size also can be reduced if the

qualitative data are supplemented with other method of data-gathering (Introduction to research, n.d).

Some qualitative researchers recommended five to 25 as adequate sample size for interviews (Creswell, 1998). Britten (2009) conducted a mixed method study of family involvement at high school level. He collected a qualitative data by interviewing four teachers and eight parents. Moreover, Antoine (2012) conducted a qualitative study on the barriers of parental involvement in high school. He collected data by interviewing five teachers and five parents. In this study, the qualitative part is used as a supplementary to the quantitative method to avoid the limitation of the single method of data-gathering. Therefore, the sample size for the qualitative part of this study is 10 in which five participants are from teachers and five participants from parents.

3.6 Instrumentation

This study used two different questionnaires to collect data from parents and teachers. The first survey is entitled School-Family-Community Partnerships Survey. The first instrument was developed by Joyce Epstein and Salinas (1993). It contains twenty items that assesses the views of both teachers and parents regarding the six types of parent involvement practices. This instrument was used to answer the first research question that is related to the schools' partnership practices for parental involvement. These practices include; Communication, Parenting, Student Learning, Decision Making, Volunteering and Collaborating with Community.

The second instrument that was used in this study is also designed by Joyce Epstein and Salinas (1993). This questionnaire entitled School and Family Partnerships contains 18 items that ask parents to make judgment of their level of participation in their children's

education. This questionnaire answers the second research question that is related to the level of parental involvement. Furthermore, both surveys ask respondents to answer demographic information such as gender, age, level of study and number of children. Two different sets of seven-point Likert scale were used to measure partnership practices and the level of parent involvement. The seven-point measuring partnership practices were: very poor, poor, somewhat poor, fair, good, very good and excellent. Therefore, higher ratings on this scale would suggest positive perceptions about school partnership practices, while low ratings on this scale would suggest negative perceptions about school partnership practices. The seven-points measuring the level of parental involvement are: never, rarely, sometimes, once a month, once a week, few times a week, and daily. Hence, higher ratings on this scale would suggest higher level of parental involvement and lower ratings would suggest lower level of parental involvement.

The researcher decided to use these two instruments because all items in both surveys are very relevant to the purpose of this study. The interview questions were formed based on the six partnership practices and the three dimensions of the level of parental involvement. To facilitate the respondents to understand the questionnaires and interview questions, both were translated into Somali language. The criterion of good questionnaire is to be clear and unambiguous having the same meaning for everyone. Understanding the questionnaire helps respondents to give appropriate responds to the questionnaire items (Morbach & Prinz, 2006).

A good translation of a questionnaire from one language (e.g. English) into Dutch consists of a process of at least 2-3 separate forward translations by translators who are native speakers of the target language (Dutch) and 2-3 separate back translations by

translators who are native speakers of the source language (e.g. English). (Institute for Health and Care Research, 2010, p.2)

The two surveys were translated by Translation Company called Multiling Translators. This company is based in Malaysia and has translators who are native speakers of numerous languages including the English language and the Somali language.

3.7 Validity

An instrument is valid if it measures what it is supposed to measure. Researchers can use such instrument if it pertains to the domain of interest (Fink, 2003). The two instruments that were used to collect data for this study were developed by very well-known authors in the research area of parental involvement. Epstein and colleagues co-authored these two instruments in 1993 and used them to collect data in various studies around the United States. According to Epstein and Salinas (1993) these two instruments are considered acceptable in peer-reviewed articles and in published academic journals.

According to Burke and Miller (2001), it is important to test the instruments before collecting data for the main study with individuals who are similar to the sample of the main study. Therefore, the questionnaires for this study were sent to experts to evaluate the quality of the translated version of the questionnaires and to check their usefulness in the context of Somalia. The experts are experienced questionnaire developers who understand questionnaire designs. They also conduct workshops and trainings on quantitative methodology in universities in Somalia. Minor changes were made based on the experts' suggestions. For example, the experts suggested a seven-point Likert scale instead of four-point Likert scale for both questionnaires.

A copy of parent survey was given to Somali parents who have children in three Somali schools in Kuala Lumpur. Similarly, teachers of these schools were given a copy of teacher survey. Both parents and teachers were asked to check the sensitiveness and appropriateness of the survey items. Teacher members as well as parent members gave positive feedback about the instruments and felt the questionnaires were pertinent to their respective groups. Then final revisions of the questionnaires were made based on their feedback.

The suggestions from the experts as well as the participants of the pilot study were mostly on wording issues of the Somali version. For instance, previously the word 'volunteering' was translated to 'si mutadawac ah'. But it was suggested a clearer word for this meaning that is 'si iska wax u qabso'. Similarly, the interview questions were sent to experts in the field of qualitative research to figure out errors and phrases that lead to misinterpretation and to check if the questions are clear, understandable, and capable of answering the research questions of the study. Then, changes were made on the interview questions based on their reviews. For instance, it was discovered during the evaluation that questions regarding 'parenting' and 'student learning' were receiving similar answers. Hence, interview questions regarding 'parenting' were removed. Moreover, the researcher used multiple informants to increase validity. To examine schools' practices for parent involvement, data were collected from parents as well as from teachers. This is a good strategy for increasing validity. According to Morbach and Prinz (2006) one way to increase validity and to get more accurate data is to use multiple informants.

3.8 Data Collection

3.8.1 Ethical Consideration

There was a time -from 1991 to 1995- that no one could attempt conducting a research in any city in Somalia. This was because conducting a research requires a systematic data collection through surveys and other methods. In those days, to move in Somalia and meet participants of a research who might be in different places were very dangerous due to insecurity and conflicts. “Questionnaires and surveys, staples of academic research worldwide, could well cause harm or upset and appear threatening to a war-damaged population due to their structural nature and the idea of right/wrong answers inducing suspicion” (James, 2014: 5).

Schools under FPENS are located in several cities including the capital city of Somalia, Mogadishu. Many of these cities are still unstable and conducting research is unsafe. However, the current situation in Mogadishu allows research to be conducted as there is not much problems and difficulties that prevent access to various locations in the capital city. “In stable and politically calm settings however the researcher is free to stay for an extended period of time” (James, 2014, p. 5). Giving consideration to safety measures, the researcher decided to select schools that are located only in the capital city of Somalia, Mogadishu.

In many countries there are educational officers within each region and educational planning officers. Researchers often seek assistant from these officers for collecting data. However, private schools are independent from these officers and have rights to refuse to participate in a data collection exercise. Dealing with such private schools, researchers must seek permission for the data collection well in advance (Ross, 2005).

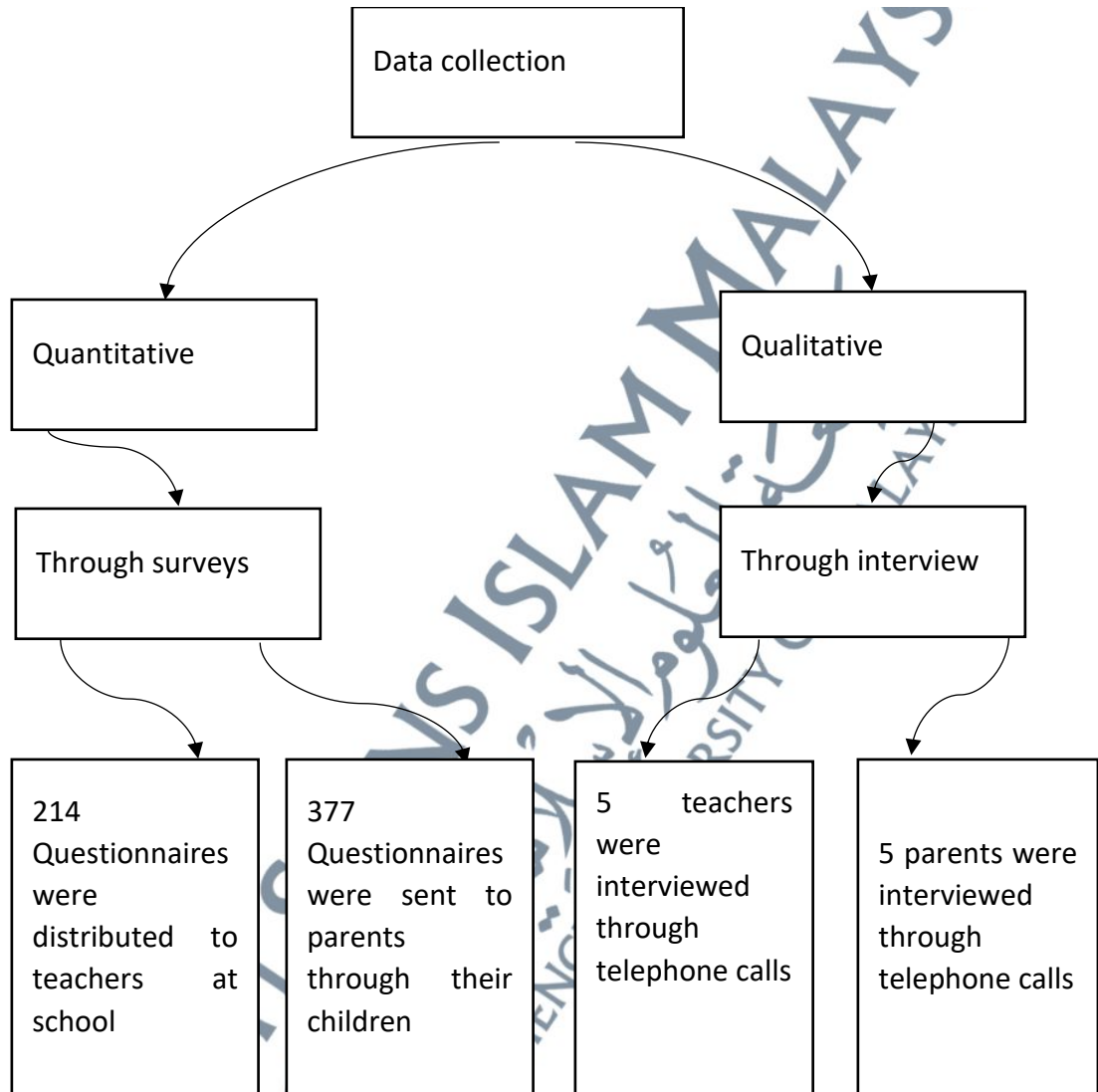
Since the target schools for this study are private, the researcher communicated with the director of the FPENS through email. In this email, the researcher first introduced himself as a postgraduate student from Somalia who are willing to conduct a research on the schools under their organization. Furthermore, as one of the schools is the researcher's alma mater, Ahmed Gurey, the researcher also informed the officer. In this email, a letter that was issued to the researcher by the center for graduate studies USIM was attached together with the aim of the letter, which was to get permission to conduct research in the schools under this organization.

Unfortunately, no response was received from the organization. Therefore, the researcher decided to communicate with the principals of these schools personally. The researcher contacted the principal of Mohamud Harbi who was the classmate of the researcher from primary until secondary school. He and another friend who is a vice-principal of one of the selected schools were happy to assist the researcher. Both friends assisted the researcher to obtain verbal approval to conduct the research in the selected schools. As the researcher was unable to attend the geographical locations of the participants of this study, the researcher appointed a qualified research assistant who can print out the surveys and distribute to the selected schools on behalf of the researcher. The surveys contained the survey questions and a cover letter that explains the purpose of the study and informs participants that their participation is voluntary. In this letter, the researcher assured the participants that their responses will be kept confidential.

3.8.2 Procedures of Data Collection

Quantitative and qualitative data were collected in this study. The following diagram illustrates the procedures of quantitative and qualitative data collection.

Figure 3. 2 procedures of data collection



3.8.2.1 Data Collection for the Quantitative Part

In collecting data from teachers, some schools allowed the research assistant to distribute the surveys to the teachers in their classrooms. Therefore, the research assistant selected teachers at different grades to gain diverse samples of teacher participation. In these schools some teachers returned the completed questionnaires on the same day, while

other teachers returned them the next day. Three of the selected schools; Usam Ibnu Zayd, Al-Najah primary school, and Imaam Shafie did not allow the research assistant to meet the teachers directly in their classrooms. Instead, the administrative staff of these schools collected the questionnaires from the research assistant and distributed to their teachers and each of these schools specified dates for the research assistant to come back and collect the completed questionnaires. The research assistant went back to these schools on the dates they specified and collected the data. The administration of Mohamud Harbi School invited the research assistant to come on a specific date where teachers are having training. More than forty teachers attended the training which was more than the required number for teachers from this school.

This study also collected data from parents. Initially, the researcher assumed that these schools organize meetings for parents occasionally and data can be collected in these meetings. However, it was realized that these school organize meetings for limited numbers of parents who represent other parents and is much less than the required sample size. Therefore, the only available way to reach these parents was through their children. Fortunately, teachers were impressed by the study that sought their perceptions and believed that the study can improve the school and family relationship. Therefore, teachers were cooperative. The research assistant benefited from this cooperation and made special request to teachers to select students from different grades and to make sure these students deliver the questionnaires to their parents and return the completed questionnaires from parents after they finish. Fortunately, the response rate of parents was much better than what was expected. This overwhelming response shows that parents were also impressed by the study that they were willing to cooperate.

The two tables below; Table 3.4 and Table 3.5 show the response rate of parents and teachers. Out of the two hundred and fourteen (214) teacher surveys that were sent to teachers at ten different schools, one hundred and seventy-four (174) surveys were returned for a response rate of 81%. Out of 214, only 24 (11%) teacher surveys were unusable and 16 (7%) teacher surveys were non-response. Three hundred and seventy-seven (377) parent surveys were sent to parents who have child/children in one of the ten selected schools and 301 surveys were returned for a return rate of 80%. In comparing the response rate between parents and teachers, teachers' response rate was higher than parents' response rate with only one percent (1%). Out of 377, 42 (11%) of parent surveys were unusable and 35 (9%) parent surveys were non-response.

Table 3. 4 Teachers' Response Rate By Each School

NO	School name	Usable	unusable	Non-response	Total respondents
1	Daalo primary school	16	5	-	21
2	Al-Rayaan primary school	12	1	3	16
3	Al-Jamhurya primary school	17	-	2	19
4	Malin Jama primary school	14	-	-	14
5	Usama Ibnu Zayd	15	4	5	24
6	Mohamud Harbi	24	6	2	32
7	Imamu Shafie	36	-	-	36
8	Al-Najah primary school	13	-	1	14
9	Suweys Primary school	12	4	-	16
10	Ahmed Gurey	15	4	3	22
Total		174	24	16	214
%		81	11	7	100

Table 3. 5 Parents' Response Rate by each School

NO	School name	Usable	unusable	Non-response	Total respondents
1	Daalo primary school	31	3	4	38
2	Al-Rayaan primary school	22	-	4	26

NO	School name	Usable	unusable	Non-response	Total respondents
3	Al-Jamhurya primary school	26	3	3	32
4	Malin Jama primary school	20	5	-	25
5	Usama Ibnu Zayd	36	5	4	45
6	Mohamud Harbi	48	9	-	57
7	Imamu Shafie	51	10	5	66
8	Al-Najah primary school	15	-	4	19
9	Suweys Primary school	20	2	4	26
10	Ahmed Gurey	32	5	6	43
Total		301	42	35	377
%		80	11	9	100

3.8.2.2 Data Collection for the Qualitative Part: Interview

Qualitative data was collected for this study through individual interviews. The two common ways of collecting qualitative research are focus group discussion and interview. However, each of the two ways are not equally successful in different situations. In some situations, focus group discussion is more appropriate than interview and vice versa. Therefore, researchers need to consider the cultural traditions of participants, the nature of interview questions, and other issues.

An essential stage in qualitative research is a conscious reflection on the quality of the data produced by different methods: cultural traditions and norms and gender roles may have a substantial impact on the success or failure of individual approaches. (Coast et al., 2009, p. 9)

One of the important things to consider when making the choice between interview and focus group discussion is the ability to arrange an acceptable time for participants. The challenge of conducting focus group is scheduling an interview for a group of people who

might be busy at different times “The researcher must realize that most interview participants lead very busy lives” (Muhammad Bilal Farooq, 2015, p. 16). Similarly, Nderu (2005) studied parental involvement of Somali parents in United States of America by using focus group discussion. When she started to collect data she found that some participants are unable to attend focus group discussions:

It was difficult to arrange an acceptable time and location for a sufficient number of participants to attend focus groups. Some of the participants were willing to join the study, but found that they could not fit it into their schedule due to demands of their families and work places. (p. 53)

In these cases, the researcher had to interview these participants at their locations and the time that they were available. Therefore, with individual interview, it is easy for both the researcher and the participants to determine the time for the interviews.

By considering the culture of the participants of this study and the nature of interview questions, the researcher decided to conduct individual semi-structured interview to collect qualitative data. Researchers need to consider cultural traditions of participants in choosing the method of collecting qualitative data. In some cultures, the focus group is more effective and works well while in other cultures it is inappropriate and participants feel uncomfortable to address the study topics in more open ways. In 1999, a group of researchers conducted a comparative study in Senegal and in Zimbabwe. The researchers combined different qualitative methods to investigate fertility decision making strategies and they found that “in Senegal respondents seemed more inclined to be frank and honest in private in-depth interviews, in Zimbabwe the interviewers believed respondents were far more likely to tell the truth in the more public focus groups” (Coast et al., 2009, p. 9).

Furthermore, the nature of interview questions has impacts on the appropriateness of the method of data collection. Participants might not release sensitive data in public. For instance, parents may be reluctant to discuss about their involvement in their children's education in focus group. Therefore, individual interview may be the best choice in these situations where frank and relaxed conversations are needed. In the study conducted by Nderu (2005) on parental involvement of Somali parents in the USA, some participants who agreed to attend the focus groups did not show up and some other participants were reluctant to answer questions during the focus groups. Hence, when was approached through phone calls and in person, the answer given was that "... they preferred to discuss the questions privately" (Nderu, 2005, p. 53).

Participants in this study were interviewed through telephone calls. Semi-structured interview can be conducted through telephone calls or face-to-face with the participants. However, there is an increasing popularity of telephone interview in recent years as a research method, which resulted from the social change and the growing reliance on telephone and internet for communication (Carr & Worth, 2001). Moreover, telephone interview has more advantages for qualitative research projects. Firstly, a telephone interview is cost effective. By using the telephone, the researcher is able to use smaller budget and shorter time. Secondly, telephone interview removes the need to travel by allowing researchers to interview participants who are geographically dispersed (Irvine, 2010). Despite the advantages of telephone interview for collecting qualitative data, some of the methodological literature particularly the traditionalists are against the use of telephone in qualitative research. They have negative view about the method and consider it as ineffective method. "The use of the telephone in qualitative interviews is discouraged

by traditionalists who view it as an inferior data collection instrument". However, qualitative researchers who have used the telephone do not support this argument. Moreover, studies that compare telephone with face-to-face interview concluded that the data collected through telephone are comparable in quality to those collected through face-to-face method (Muhammad Bilal Farooq, 2015, 2).

Traditionalists considered the telephone interview ineffective method for three reasons. Firstly, they claim that researchers are unable to create a rapport, which is a key ingredient for providing a comfortable environment that encourage interviewee to speak freely. Secondly, traditionalists argue that telephone interview lacks facial expression and body language used by both the interviewer and interviewee, which is important for interpreting what is being communicated. Thirdly, traditionalists argue that interviewers lack access to participants' environment. This means researchers cannot assess if participants are comfortable in their environment and free from distractions, which can create confusion and misunderstanding.

Qualitative researchers have disproved the three claims of traditionalists by comparing data attained through face-to-face with data acquired through telephone interview. Researchers found no difference in the nature and depth of responses across interview modes. For instance, studies provided evidences that telephone interview does not negatively impact the ability of interviewers to create rapport with interviewee. Vogl (2013) compared fifty-six face-to-face interviews against fifty-six telephone interviews. He found no difference in the level of rapport achieved across either modes. Furthermore, researchers stated that lack of facial and body language are not barriers for successful interview if the interviewers listen carefully and effectively to what the interviewee is saying. They argue

that attempting to interpreting body language is a challenging task and it assumes that participants are unable to articulate their message. Such practice may intentionally or unintentionally be misleading information and therefore is best left to psychologists.

Based on the preceding discussion, it is clear that telephone interview is considered a valid method for collecting qualitative data. On top of that, telephone interview reduces time, cost and removes the need to travel. Since the researcher is unable to reach the geographical places of participants due to time and cost constrains, conducting face-to-face interview become impossible. Therefore, participants in this study were interviewed through telephone calls. Principals of the selected schools were requested to recommend participants in the interview. Then, the researcher contacted the recommended participants and selected the first five teachers and the first five parents who accepted to participate in the study. Then the researcher explained to them the purpose of the study and informed them that their participation is voluntary. Participants were also informed that their voices will be recorded, but they were assured that their responses will be kept confidential. The researcher made appointments for interview sessions for those interested to participate. Participants were told to choose the time that was most convenient to them. The telephone interviews were conducted on the time chosen by the participants. The interviews lasted about ten minutes long each. During interviews, the researcher recorded all the discussions with all participants for transcription purpose by using an audio recorder.

The following table illustrates the methods of data collections for each of the Research Questions

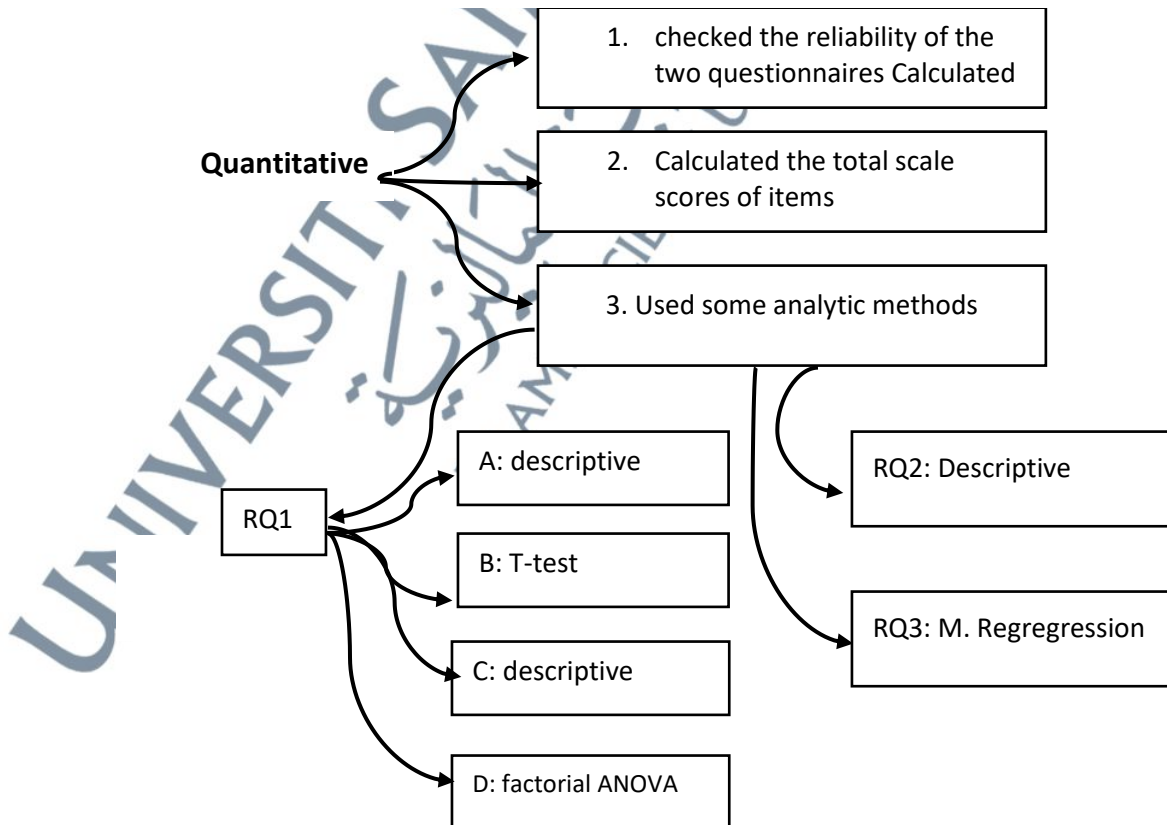
Table 3.6 Methods of data collection for Research Questions

Research questions	Methods of data collection
RQ1A: How do parents and teachers perceive schools' practices for PI?	Survey and interview
RQ1B: Is there a statistically significant difference in the Mean of the perceived school practices scores for teachers and parents?	Survey
RQ1C: Do parents' and teachers' perceptions of schools' practices lead to balanced or imbalanced relationships?	Survey
RQ1D: Are there significant differences in the perceived school practices for teachers varying on educational level and age?	Survey
RQ2: What is the level of parental involvement in the selected primary schools?	Survey and interview
RQ3: What are the factors that are impacting parental involvement level?	Survey

3.9 Data Analysis Procedure for the Quantitative Part

The following diagram illustrates the data analysis procedure of the quantitative part of this study.

Figure 3.3 Procedures of quantitative data analysis



3.9.1 Reliability Check

Reliability is an important issue to consider when choosing a previously developed questionnaire or when constructing new instrument. This is because the reliability of instrument influences the quality of data that you obtain. Reliable instruments produce findings in a consistent, accurate, and meaningful way (Pallant, 2007). The first questionnaire that was used in this study contains a total of twenty items measuring the perceptions of parents and teachers towards school practices for partnership. The reliability of the first instrument that was entitled School-Family Community Partnership survey was tested by using Cronbachs' alpha for each of the six scales. The following are the alpha coefficients for each of the six practices: Communication had a reliability coefficient of 0.63, Student Learning had a reliability coefficient of 0.70, Parenting had a reliability coefficient of 0.71, Decision Making had a reliability coefficient of 0.78, Volunteering had a reliability coefficient of 0.71, and Collaboration with Community had a reliability coefficient of 0.87. The average of the Cronbachs' alpha for the six scales was 0.92. Thus, the reliability of the School-Family Partnership instrument in this study is within the required and acceptable range. This study used another questionnaire entitled 'School and Family Partnership' that contains 18 items measuring the level of parental involvement. Similarly, the reliability of the second questionnaire was tested by using Cronbachs' alpha. The average of the Cronbachs' alpha for the second instrument was 0.913. Thus, the reliability of the two instruments that were used in this study are within the required and acceptable range.

3.9.2 Calculating Total Scale Scores

This study used two questionnaires to collect data. The two questionnaires contained several domains and each domain contains some items that are related to one another conceptually and statistically. Combining item scores in each domain reduces the potential of information overload and makes the data suitable for specific analyses and easier to interpret. Hence, items of the domains of the two questionnaires were calculated separately to produce a single scale that represents each dimension. Table 3.6 and Table 3.7 show the total scale scores of the dimensions of the two questionnaires.

Table 3. 6 Teachers' and Parents' Total Scale Scores of the Six Dimensions

Dimensions	Teacher			Parent		
	N	M	SD	N	M	SD
Communication	174	4.96	1.23	301	5.38	0.96
Student Learning	174	5.06	1.14	301	5.18	0.98
Decision Making	174	4.05	1.45	301	5.46	0.86
Parenting	174	4	1.57	301	5.36	0.84
Volunteering	174	4.43	1.53	301	5.30	0.87
Collaboration with Community	174	4.10	1.60	301	5.76	1.04

Table 3. 7 Parents' Total Scale Scores Of The Three Types Of Involvement

Dimensions	N	Mean (M)	Standard deviation (SD)
Activities that require more skills and knowledge	301	4.08	0.95
Activities that don't require more skills and knowledge	301	3.97	1.39
Activities that require time and energy	301	3.73	1.07

3.9.3 Analytic Methods

This study used some statistical techniques including descriptive, T-test, two factorial ANOVA and Multiple regression to analyze the research questions of this study.

Descriptive statistics

Descriptive statistics, such as means, percentages and frequencies, was used to analyze the following Research Questions:

- i. How do parents and teachers of the selected primary schools perceive schools' partnership practices for parental involvement?
- ii. Do parents' and teachers' perceptions of schools' partnership practices for parent involvement lead to balanced or imbalanced relationships?
- iii. What is the level of parental involvement in the selected primary schools?

Independent-samples T-test

An independent-samples T-test was conducted to compare the perceived school practices by teacher and parents.

Is there a statistically significant difference in the Mean of the perceived school practices scores for teachers and parents?

Two-way Factorial ANOVA

Two-way Factorial ANOVA was used to analyze the following Research Question:

Are there significant differences in the perceived school practices for teachers varying on educational level and age? Do the effects of educational level on the perceived school practices vary depending on teacher's age?

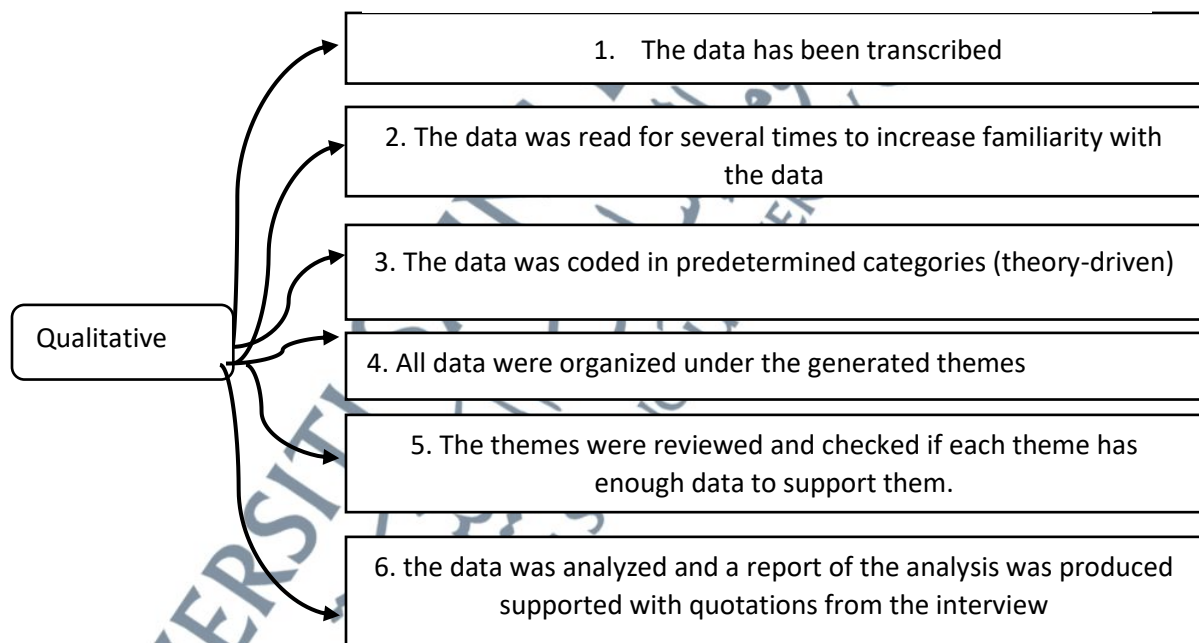
Multiple Regression

Multiple regression was conducted to explore the relative contributions of parent's education, gender, and six partnership practices on the level of parental involvement. The focus is to identify to what extent do parent's education, gender, and school practices (Student Learning, Communication and Decision Making) predict the level of parental involvement?

3.10 Data Analysis Procedure for the Qualitative Part

The following diagram illustrates the data analysis procedure of the qualitative part of this study

Figure 4. 1 Procedures of qualitative data analysis



This section describes the analyzing procedure of the data obtained from the qualitative part via interview carried out with parents and teachers. This study used Braun's and Clarke's (2006) six of thematic analysis to analyze qualitative data. Thematic analysis is a straight-forward form of qualitative analysis and useful even for those who are still learning

qualitative techniques as it does not require the same detailed theoretical and technical knowledge that other methods require (Bruan & Clarke, 2006). The interview was conducted in Somali language to encourage informants to speak openly and expand their views. The data has been transcribed. Then the transcriptions were translated into English language and checked against the original for accuracy.

The researcher conducted the interview by himself. This enabled the researcher to gain some knowledge about the data even before analysis. However, to begin the analysis process in the first stage the researcher read the entire data set for several times searching for meanings and to increase familiarity with the data. According to Braun and Clarke (2006: 18) there are two major forms of coding; data-driven and theory-driven “Coding will to some extent depend on whether the themes are more “data-driven” or “theory-driven”– in the former, the themes will depend on the data, but in the latter, you might approach the data with specific questions in mind that you wish to code around”. The first type, the coding is based on the data without trying to fit into pre-existing coding form. While in the second type, researchers start with a list of categories in advance and then search the data for text that matches these predetermined categories. The purpose of the qualitative part of this study was to explain in more depth the quantitative results. Therefore, in the second stage of the analysis of this study the data were coded based on the quantitative results about school practices for parental involvement and the quantitative results of the level of parental involvement. In the third phase, the researcher started to generate significant themes from the coding process and all data were organized under these themes. In the fourth stage, the researcher reviewed the data by reading all the collated extracts for each theme and checked whether they form a coherent pattern, and if each

theme has enough data to support them. In the fifth stage the researcher identified the interesting points made by participants supported by quotations from the interview. Moreover, the researcher identified the overall story of the data and the story that each theme tells by writing a detailed analysis for each theme. In the sixth stage, the researcher has analyzed the data in a way that provides a concise, coherent, and interesting account of the story of the data. The researcher produced a report of the analysis by relating back to the research questions and literature.

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