

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter presents the overall design of the study and identifies the research population. It also traces how the instrument was developed. A brief outline of the items used in the instrument is also included. It then explains how the interview was carried out, the types of data collected and how the data were analyzed.

Research Design

This study is an empirical qualitative research intended to investigate the information needs of children between the ages of ten to twelve in four regions of Peninsular Malaysia. Information needs studies have witnessed various methods being employed by the researchers. In this research the investigator has employed combination of two approaches as identified by Hill (1987) in her study. The approaches observed in this research are ;

- (i) **‘ought to need statements’**, that is statement about what information the client (in this case, child) ought to need. In this research the ought to need was identified by adults who work closely with children

- (ii) **'Goal-oriented analysis'** which assumes that clients (children) are trying to solve problems in order to achieve goals.

Five aspects of research were chosen to include in the study: children's information needs, their current sources of information and effectiveness of those sources, information that those children are not getting, barriers and factors affecting children's information possession, and suggestion on improving information provision to children. The choice on the components of investigation was based on review of related literature, the advice of investigator's dissertation supervisor, and the scope of the study determined earlier.

The research population of this study consisted of children in the selected four regions in Peninsular Malaysia aged between ten and twelve. The primary reason for the selection of this particular group is that ten to twelve year-old children are in the exciting developmental stage which Piaget termed as concrete operational (Siegler, 1991). The child's thinking capabilities are well developed; they are very receptive to information as they can read, write and count. They are also capable of learning critical thinking skills that will help them evaluate information. In addition, children's information needs change as they grow and develop. The information needs of children at the age of two, are different compared to children at the age twelve. Limiting the age at a close range would provide a more reliable finding. Furthermore the respondents (adults) would be able to provide reliable information when they are given a clear scope of the population.

In Malaysia, this particular population group is generally in Year Four to Six (Phase Two) in primary schools. The curriculum used in national and vernacular schools is similar, even though the medium of instructions is different. This makes the educational information needs among these students similar. As a result, there will be a common needs in number of aspects including the school curriculum. In addition to that children between the age ten and twelve usually come to the end of childhood stage before stepping into adolescence. Both girls and boys aged ten to twelve would start to experience physical changes in their body. Most of all these children would experience sexual changes in them. Girls for example reach puberty; thus many girls at this age may experience menstruation for the first time. Those new experiences and changes make children at this age critical and unique. This also means that the information needs of children of this age is unique and interesting to study.

Instrument

A common open-ended questionnaire was developed to use in the data collection task. The questions included in the interview were primarily based on the instrument used by Walter (1994) in her study on information needs of children in California, United States. Questions in the instrument is very much the same as the questions used by Professor Walter in her similar study in California in 1994. This also means that validity of this instrument is not much to be doubted as the instrument has been tested before. In addition to validity, the first draft of the question schedule was checked with two English lecturers and two parents to check the meaning of the questions as intended by the researcher. All the questions were well understood as

intended. With that the reliability of the instruments was also maintained at a higher level. Seven questions were included in the interview schedule. All these questions were systematically designed to fulfill the research objectives outlined in the study. A copy of the interview question schedule can be seen in appendix A. The questions included in the interview schedule were;

- (i) Based on your experience and expertise, what do you see as the primary information needs of children age between ten and twelve in this region? What do children need to know in areas such as health, security and so on?
- (ii) What are some of the other information that children of this age need to have?
- (iii) Where and how do these children find this information currently?
- (iv) How well are these information needs met?
- (v) In your area of expertise, what major information do they need that they are not getting it, if any?
- (vi) What are the barriers to children getting the information that they need ?
- (vii) What could be done to improve the quality and quantity on information that these children receive currently?

Selection and the Composition of the Population

As mentioned earlier the study consisted of children in the four regions in Peninsular Malaysia between the age of 10 and 12. The four regions were chosen with the aim of getting data on children's information needs as general as possible. The four

regions are situated in different states. Malay ethnic group dominates the two northern regions. Well-balanced ethnic groups dominate the central region. While the southern region is also well balanced in terms of ethnicity. Children in the central and southern region live in a more modern environment compared to the two northern regions. This made the children population involved in the study, to be well balanced in terms of ethnicity, culture, religion, education and Socio-economic status.

The target population of this study were less than 24 percent of the total population (Khoo, 1991). However, the target group is diverse in terms of ethnicity, social economic status, religion, and culture.

The tables below show the breakdown of population aged ten to twelve in Malaysia. The statistics is expected to give a general indication of the status of the population group of the study. Sex, ethnic and attendance to school are given in three tables. The age in the tables is given as found in the census. There was no census obtained specially for children age ten to twelve of the four regions. However, the statistics will be able to give a general idea on the three aspects mentioned above. The statistics on the school attendance was included in order to show that almost the total population included in the study has attended schools. This will have some implication on the information needs of these children in relation to education and school chores.

Table 1: Population Distribution According to Age and Sex Group in 1991 (Malaysia)

Age	Percentage from the total population (%)	Percentage from the total male population (%)	Percentage from the total female Population (%)
5 - 14 Years old	24	24	24

Table 2 : Population Distribution According to Age and Ethnicity in 1991 (Malaysia)

Age	From the total population within the category			
	Bumiputra (%)	Chinese (%)	Indian (%)	Others (%)
0 - 14 Years old	40	30	34	41

Table 3 : Percentage of Population having Attended School by Age Group and Sex

Age	Total (%)	Male (%)	Female (%)
10-14 Years old	98	98	98

(source : Khoo Soo Gim, 1991)

Respondent Selection Criteria

The identification of the respondent or informants was done with the help of friends and educational officers (teachers and lecturers) in the four respective areas. A list of six respondents from each region was submitted for selection. However, decision was made to select 6 respondents from central, 2 from northeast, 5 from south, and 2 from northwest region. A total of fifteen respondents were identified as the total respondents of this study. The decision on the breakdown was made taking into

consideration the capacity of the researcher to carry out the interviews covering a wide geographical region. More respondents were selected from south and central region to make the data collection task easier as the researcher has easy access to those regions. All the fifteen respondents or the informants selected were those who fulfilled the following criteria:

- (i) Respondents have worked with children or have been involved in children's affairs, activities, and issues related to children
- (ii) Respondents have at least five years of experience working with children or have been involved in children's affairs
- (iii) Respondents have a good language communication skill so that ideas, opinions, and mental thoughts could be noted easily in the interview form by the interviewer
- (iv) Respondent possesses some knowledge on multicultural society in Malaysia, especially some knowledge on Malay, Chinese, and Indian culture.

Respondents /Informants

Unlike the study of information needs of adults, this study seeks to identify children's information needs as perceived by adults. Children's life is very much determined and controlled by adults. What distinguishes these information needs from adult information needs is that others impose most information on children. Although children have self identified information needs and wants, much of those self identified

information is information they not necessarily ought to need (Walter, 1994). Besides the above reasons, the decision to use adults as respondents in this study is also based on the following assumptions;

- (i) Children are frequently unaware of their information need (ought to need).
- (ii) Significant adults in children's lives minister to their information need.

The inability of children to differentiate the wants and needs have been noted in number of studies mentioned in the literature review. Studies by Walter (1994), Kulthau (1993), and Walter and Borgman (1991) are a few examples which have stressed the role of adults in providing information to children. These studies also influenced the researcher to choose the adults as respondent in this study.

The respondent are equally diverse as the research population in terms of race, religion, social economic status, education, culture, and geographical area. However, in order to account for the cultural and social variables, a good representation of respondents was maintained. Adults who work with children in a variety of capacities were identified in four regions in Peninsular Malaysia. The four regions were ;

- (i) Johore State (South)
- (ii) Klang Valley (Central)
- (iii) Kota Baharu, Kelantan (North East)
- (iv) Sungai Petani (North West)

Individuals who fulfilled the selection criteria were chosen as respondents or informants in this study. Kindergarten teachers were also included even though they are not involved with children aged ten to twelve. This is because of their experience and knowledge on children at four to six years. Efforts were also made to involve people of different sex. A total of fifteen key respondents or informants were interviewed. The table below shows the breakdown of the respondents or the key informants identified for this study.

Table 4: Summary of Key Respondents/Informants

Title/Profession	Gender	Ethnicity	Region
Parent	Male	Indian	Central
Parent	Female	Malay	South
Kindergarten teacher	Female	Chinese	Central
Kindergarten teacher	Female	Indian	North East
Welfare Officer	Female	Malay	South
Lecturer	Male	Chinese	South
Primary school teacher	Male	Malay	South
Primary school teacher	Female	Indian	Central
Information Officer	Male	Indian	North West
Primary school Headmaster	Male	Indian	South
Doctor	Male	Indian	Central
School Nurse	Female	Indian	Central
Social Worker	Male	Chinese	Central
Lecturer	Male	Chinese	North West
Police Officer	Male	Indian	North East

Collection of Data

The goal of the instrument was to gather rich qualitative data that would lend to deep analysis. Hence, the data were collected through lengthy interviews with key respondents. The interviews were conducted over a period of one month. Each interview took half an hour to one hour thirty minutes.

Appointments were made for interviews before hand. During the interview, the researcher took extensive notes. Most of the notes were written using the actual words used by the respondent. Interviews conducted in Malay language were written using the respondent's language. Later it was translated to English with the help of Malay language lecturer from Batu Pahat Teacher Training College. A number of difficulties were encountered in the data collection phase. The main obstacle was that a number of respondents were unable to meet the appointment dates. New dates were fixed convenient to the respondents. During the interviews more probing questions were thrown to respondents to help them express their comprehensive views and ideas. Examples of the interview transcripts can be seen in Appendix B.

Two of the interviews were conducted through e-mail as these respondents were unable to meet on the appointment date. One was from Banggi and the other was from Kelantan. These two respondents were contacted three to five times each to gather the full data of all the questions. Data collection was carried out successfully even though some minor obstacles were encountered. All the fifteen respondents were interviewed successfully as scheduled in the planning.

Data Analysis

The data derived from the interview sheets were analyzed using lexical analysis software known as Vocabprofile developed by Paul Nation from Victoria University of New Zealand in 1994. This program was very helpful in extracting the keywords and counts found in the transcript. The contents (answers) from each question were keyed in text format. Analysis was done using the program after entering all the data. Frequency counts of keywords for all the seven questions were obtained (One example is given in Appendix C). Later, the related terms were clustered under similar categories. They were then tabulated and analyzed.

The analyzed data was then synthesized and presented in narrative form. The findings and conclusion were then described based on the objectives and the research questions of this study. The results and discussion are presented in the next chapter.