CHAPTER 3 RESEARCH METHODOLOGY

This chapter describes the Research Methodology employed in the study. This chapter can be divided into four major sections, which includes questionnaire design, sampling design, data collection techniques and data analysis techniques.

3.1 Questionnaire Design

An eight-page close-ended survey questionnaire, which consisted of 29 questions (Refer Appendix A: Survey Questionnaire English Version) was used to explore the relative influence of various variables on the residential choice of respondents, and buyer search in housing market.

The questionnaire was divided into 3 major sections with strict instruction that the questionnaire was only eligible for respondents who own a house. The questionnaire was mainly consisted of close-ended questions, which were straightforward, and thus was self-administered by the respondents who are the house owners. Since the targeted respondents were mainly working people from various social classes in a metropolitan area, the research instrument (questionnaire) was prepared in both English and Malay languages.

Section A was used to obtain more details pertaining to the home information of the respondents. Information on the type of residence which is currently occupied or owned by the respondents, year of the purchase and the purchase price of the house and this would be useful in identifying the types of residential property which were more favourable to the respondents. Other information such as renovation works and the renovated areas would provide some insight in understanding the consumer satisfaction towards the house. Some of the questions chosen under the section A are:

| 1. Type of residence | [] | Single Storey Terrace |
|--------------------------------|-----|--------------------------------|
| | [] | Double Storey Terrace |
| | [] | Single Storey Semi-Detached |
| | | |
| 2. Purchase price of the house | [] | Below RM50,000 |
| | [] | RM 50,000 - RM99,999 |
| | [] | RM100,000 - RM149,999 |
| | | |
| 3. Areas of house renovated | [] | Front |
| | [] | Back |
| | [] | Separating toilet and bathroom |

Section B was used to examine the perceptions of respondents towards the choice of house and to identify the significance or "saliency" of variables that influence house buyers in their choice of house. The variables that were used in the study were categorized into five groups, which included property design/characteristics, distance variable/location, environmental/neighbourhood, financial variable, and developer's track record. This approach was adopted mainly from the research conducted by Adair, Berry and McGreal (1995).

In their study, the authors have categorized all the 55 variables into four groups, namely property, distance, environmental and financial characteristics. Researcher has compiled all the 55 variables that comprise both quantitative and qualitative aspects of housing to be used in the study.

Besides, the researcher has also integrated the factors that were discussed by Suresh (1996), Sidek (2000), Hor (2001), and Lim (September 23, 2001) etc. in the study.

As per the study by Suresh (1996), it reveals that various factors such as

location (accessibility), physical characteristics of the development size and the particular unit, and cost factors, among others are the most influential factors in condominium housing selection. Research by Sidek (2000) shows that the value accorded to a house included price, good and save location, clean and safe environment, good neighbors, large floor area, timely delivery period, good construction and building materials quality.

Other factors which has been highlighted by Hor (2001) and Lim (September 23, 2001) include accessibility, traffic pattern, amenities, school, the developer's track record, the neighbourhood, the overall development, the unit design etc.

From the gathered factors or variables, the researcher has selected 30 variables which were more applicable to the local market and regrouped them into five key areas, i.e. property design/characteristics, distance variable/location, environmental/neighbourhood, financial variables, and developer's track records as depicted in question 7 of the questionnaire.

To measure the significance or "saliency" of variables, the researcher has employed a five-point scale in the research. Respondents were ask to state the relative influence of each variable on their residential choice decision over a continuum from "1 = no influence" to "5 = very strong influence". The technique employed was derived from the previous studies used by Adair, Berry and McGreal (1995). While there is no absolute measure of a significant or important influence, the general approach in the literature is that variable with the highest mean score (more than 3 point) represents the most important influence level.

To further examine the perceptions of respondents towards the choice of house, question 8 has been established. Respondents were asked to rank the most influential factors (e.g. price of the house, location of the house, environment of the housing areas, physical characteristics of the house and developer's reputation) in making their home buying decision from one to five according to the most influential to least influential. The above ranking methodology was not

noted in the previous study and it was initiated to ascertain the findings in question 8.

Likewise, question 9 in the questionnaire has been constructed to identify the house owners' expectations and needs before they made the decision to purchase a house. This idea was generated from the methodology employed by Sidek (2000), however the researcher only concentrated on the five major attributes such as price, location, environment, physical characteristics and developer's reputation. 10 statements have been constructed and were measured with a seven-point scale from "1 = strongly disagree" to "7 = strongly agree". Respondents able to indicate their attitude by checking how strongly they agree or disagree with statements. For example:

- 1. I don't mind paying much more as long as the house design is nice.
- 2. I don't mind paying much more as long as the location is strategic.
- 3. I don't mind paying much more as long as the housing environment is nice.

In order to understand the housing needs of the house buyers, question 10 had been established and was originated from the study by Hempel and Punj (1999). According to the study, the dependent variable in the consumer model of homeownership is specified as being influenced by factors that can be grouped into three theoretical blocks: buying power, housing need and purchase orientation. Together with the studies by Marbeck (1994) and Abdullah (1996), the researcher had constructed question 10 for the purpose of identifying the housing needs of the house buyers. Respondents were requested to select freely from the 10 underlying factors, i.e. want to own home, not rent, change in marital status, to establish own household, financial investment etc.

Besides, the researcher was also interested to study the search behaviour of house buyers. Firstly, question 11 has been formed to explore the most effective channels in reaching the home buyers (e.g. broker/agency sales, advertisement

in newspaper, magazines, broadcasting media, advice from friends, colleagues and relatives, builder web site, third party web site, home exhibition centres etc.). To measure the most popular channel, respondents were asked to indicate how frequent they used the various searching tools, i.e. never, seldom, sometimes, regular, always. The above concept was derived from the studies by Marbeck (1994) and Abdullah (1996).

Subsequent to question 11, in view of increasing popularity of Internet in our daily life, there was a question to explore the use of Internet in home searching and whether home purchasers paying attention to it. This idea was taken from the study conducted by Littlefield, Bao and Cook (2000). Besides, the opinion of home purchasers (Internet users) on quality of Internet real estate information has been obtained through question 12. The quality of real estate information through Internet was measured in terms of reliability, accuracy, relevancy, usefulness and attractiveness. Consumers' Association of Penang via its publication in year 1986 has highlighted the issues of misleading information in advertisements for house buyers.

To further explore the search behaviour of house buyers, the researcher adopted the method employed by VanderHart (1994) in the study of buyer search in a housing market. Question 14 and 15 of the questionnaire had constructed to measure the duration of search by a house buyer in terms of time and number of house inspected. Besides, the knowledge level of respondents about the local housing market was gathered through question 16.

Lastly, in Section B, the researcher had constructed a question to explore the features in advertisement which were most appealing and more eyes catching to the house buyers. Respondents were required to rank from "1 = most attractive" to "3 = least attractive" on seven features as depicted in question 18, i.e. attractive pricing, attractive location, attractive house design, attractive promotional package etc. The researcher initiated this question as this information might be very useful to the house developers when strategizing their

new launching.

In section C, the respondents' personal information was collected for the analysis of demographic profiles and cross-tabulation purpose. Some of the questions asked were as following:

| 1. Ethnic group | [] | Malay |
|-------------------|-----|---------------------------|
| | [] | Chinese |
| | [] | Indian |
| | [] | Others |
| | | |
| 2. Age | [] | 20 - 29 years old |
| | [] | 30 - 39 years old |
| | [] | 40 - 49 years old |
| | [] | 50 - 59 years old |
| | [] | 60 years old and above |
| | | |
| 3. Marital status | [] | Single |
| | [] | Married without children |
| | [] | Married with children |
| | f 1 | Divorced or single parent |

In designing the questionnaire, a pre-testing was conducted on five people among the researcher's friends and colleagues of different education level, ranging from STPM, degree to master holders. As a result of the pre-testing session, certain ambiguous questions were simplified prior to the well-designed questionnaire was constructed, commented and finally been approved by the experienced and knowledgeable professor.

3.2 Sampling Design

In this research, a nonprobability sampling technique, namely convenience sampling was used to obtain respondents within the Klang Valley. Convenience sampling method is defined as a sampling procedure used to obtain those units or people most conveniently available to the researcher (Zikmund, 1997).

The sample population of this research was limited to house owners in the Klang Valley. The method was chosen under several considerations as followings:

- It was more convenient to carry out the survey so that the research could be completed under the time and resource constraints.
- Klang Valley is well-developed metropolitan vicinity which is more advance as compared to other cities or areas, especially in business activities and in the area of information technology development.
- Background of residents in Klang valley are more complex and sophisticated. Residents may vary very much in terms of knowledge, level of education and income, social class or the original hometown. Residents from Klang Valley are hence, more sophisticated and believed to have greater housing needs and better purchasing power towards the big-ticket product like house.

The sampling was carried out in the Klang Valley and a sample of 350 respondents was randomly selected among the residents of Kuala Lumpur and Selangor to determine the buyer behaviour in home buying and the search behaviour of buyers in housing market. The respondents were mainly from the middle-income to upper-income earners, including government employees, private sector employees, self employed, retired and others. The rationales to select the sample mainly from the middle-income and upper-income earners were due to the fact that the more actively transacted types of properties were the double-storey terraced houses and condominium/apartments as revealed by Lim (September 3, 2001). Besides there was also the trend that more homebuyers are buying higher price residential properties in Klang Valley.

Besides, it was noted that during the Seventh Malaysia Plan Period (1996-2000), the size of middle income households, defined as those earning between RM1,500 and RM3,500, expanded to 37% in 1999 from 32.3% in 1995. The mean monthly gross household income increased by 22.4% to RM2,472 in 1999 from RM2,020 in 1995. In 1980, the mean income was RM1,098 a month (Lim, June 4, 2001).

3.3 Data Collection Procedure

The data collection was spread over three weeks between December 8th to December 22nd 2001. The questionnaires were distributed only to the respondents who were willing to participate in the survey and are a house owner. The questionnaires were personally given to the respondents with some brief introduction on the purpose of the survey and were self-administered.

The targeted sampling for this study was at least 300 samples. In order to achieve the targeted samples of 300 and to avoid any misrepresentation in the study, a total of 350 questionnaires were distributed personally by researcher or through friends/relatives. Of the total of 350 questionnaires, 130 copies have been distributed in offices, 155 copies have been conducted house to house and the balance of questionnaires have been distributed in shopping complexes (30 copies), LRT station (10 copies), and to MBA students of University of Malaya (25 copies). Researcher has personally carried out 150 surveys while the remaining were assisted by friends (120 surveys) and relatives (80 surveys).

The sampling was carried out in various areas of the Klang Valley, namely the business district of KL center, Subang Jaya, Shah Alam, Kepong, Puchong, Cheras, etc. The structured qestionnaires were handed over to the eligible respondents personally and the respondents were requested to complete the questionnaire immediately. If they were not able to do so, arrangements were

made to collect the completed questionnaire personally at a later time or date, normally the next day to avoid any possibility of missing questionnaire. For questionnaires that were distributed via friends/relatives, same practice was encouraged and the assistant researcher (friends/relatives) handed over the collected questionnaires to the researcher on the following week.

In the business district of KL center, 125 of the questionnaires were distributed, which contributed 35.7% to the total number of 350 samples. Some of the business and shopping complexes covered in the survey included Wisma AIA, Menara Great Eastern, Wisma Singapore Airline, Wilayah Complex, Menara Multi-Purpose, Sogo Shopping Complex, Wisma RKT and Dang Wangi LRT station. The organizations that surrounding the areas include computer software/hardware vendors, property development, investment holding, insurance, bank and financial institution, public accounting and other consultation services.

As for the areas of Subang Jaya and Shah Alam, 75 copies (21.4%) and 50 copies (14.3%) of the questionnaire have been distributed to the house owners for the survey respectively. Another 25 copies of the questionnaire have been distributed to the house owners who reside in Kepong, Puchong and Cheras respectively. Lastly, the balance of the questionnaires was distributed to the MBA students of University Malaya due to the convenience purposes.

By the stipulated due date of data collection, 312 copies were received and thus provide a returned rate of 89.14%. However, during the data encoding process, 6 copies of the returned questionnaires were incomplete or with some missing information, and thus had to be rejected. Hence, the survey produces a total usable questionnaire of 306 copies, which represents an actual response rate of 87.43%.

3.4 Data Analysis Techniques

The survey primary data was analysed by using the Statistical Package for the Social Sciences (SPSS) software for Window version 9th.

Among the statistical tools that had been conducted in the analysis were percentage, frequency, means, cross-tabulation analysis, two independent sample t-test and chi-square test.

At the beginning, a simple frequency summary was used to indicate the demographic profile of respondents from gender, age, ethnic group, education, income and occupational level. Frequency analysis was also used in the summary of home information of the respondents, i.e. type of residence, year of purchase, purchase price of the house, renovation works, etc. For information on preferred house choice, buyer search behaviour and housing needs etc., frequency analysis was also applied in the study.

For second part of the analysis, mean analysis was used to check on the opinion of respondents in their home choice. Analysis of data was based on the mean scores, which were considered to provide better discrimination than the use of either the median or mode. The scores were then used to rank the relative influence of each variable (Churchill, 1982). In employing such a methodology, Churchill focus on variables scoring 3.00 or greater as being significant. While such a cut-off point may be considered arbitrary, it was shown to provide meaningful outcomes in terms of discriminating between variables. Thus, the researcher employed the above data analysis technique in identifying the significance variables in home choice and housing knowledge of respondents.

Chi-square test (in conjunction with cross-tabulation) was used to test of differences of demographic characteristics in home selection criteria, types of residence, price of the house, preferred house choice, house search through Internet, etc. For all the testing, a significant level of 0.05 was selected to

determine the significance of the study.

Lastly, t-test and means scores were selected to test whether there was significant difference between the selected ethnic groups, i.e. Malay and Chinese in housing choice, house searching etc.