

### CHAPTER III

#### RESEARCH METHODOLOGY

The chapter outlines the methodology used in the study. They include a discussion on the sampling design, research instruments, data collection procedure and the statistical techniques used to analyze the research data.

##### Sampling Design

The study was confined to the residents of Kuala Lumpur and Petaling Jaya with the following characteristics:

- (1) Females age 15 to 39 year old, and
- (2) Buyers and users of hair shampoo

The study was focused on females only because majority of them are purchasers of hair shampoo. In addition, the age of 15 was selected as the reasonable cut-off point because teenagers are capable and sensitive enough to make their own decisions pertaining to personal care products. Moreover, according to ACNielsen's report on usage and purchase patterns of hair shampoo, individuals between 15 - 39 year old are the core buyers and users of hair shampoo (ACNielsen PCPI, 1999).

Though the sample might be urban, it is acceptable for the purpose of this research which is mainly exploratory in nature. The eligible respondents were identified by screening the answers provided in the questionnaire regarding hair shampoo products bought and used. A sample size of 300 respondents is

targeted to provide an adequate level of confidence in the study and higher level of reliability in data analyzes.

### Research Instrument

The survey instrument was a structured five-page questionnaire as shown in Appendix A. The questionnaire was divided into 6 sections. Section 1 consists of two screening questions. Section 2 was designed to describe the characteristics of hair in terms of length, style, hair condition, texture of hair and whether hair was permed and colored. Section 3 focuses on usage patterns of hair shampoo. This section begins with the unaided brand awareness followed by usage patterns. It consists of open-ended and close-ended questions.

Section 4 measures performance of respondents' most often used brand. This section consists of 12 product attributes. Respondents were required to evaluate the performance of the brand that is frequently/most often used on each attribute along a five-point scale of the criteria. This section also requires respondents to state their hair problems that their most often used brand cannot address.

Section 5 was designed to understand their purchase patterns with regards to who decides on the brand of hair shampoo to buy. It also consists of 16 selection criteria. Respondents were required to indicate the importance of each selection criterion along a five-point scale ranging from (1) not important at all to (5) very important, in influencing their choice of brand. This section also

aimed to understand what if the respondents' most often used brand is not available at the point of purchase and the hair shampoo purchase channel.

Section 6 was designed to collect demographic profile of respondents including ethnic group, marital status, age, highest education level, occupation and personal income per month. Due to the personal nature of the information required, these questions were only asked at the end of the survey. This would reduce unnecessary resistance of the respondents to participate in the survey. The demographic variables were measured through close-ended multiple-choice format.

The completed questionnaire was subjected to a pre-test using 10 respondents. The objective of the pre-test was to test the contents and clarity of the questionnaire. Based on the feedback obtained from these respondents, the final version of the questionnaire was developed.

Due to the multi-racial nature of the respondents, versions in two languages were produced. The original English version of the questionnaire was translated into the Malay language using the back-to-back translation method.

### Data Collection Procedure

The method used to collect the data was the survey. Primary data were obtained by using convenience sampling through self-administered method with a sample of users and purchasers of hair shampoo in Kuala Lumpur and Petaling Jaya. Using convenience sampling, a total of 300 respondents were selected.

The respondents were selected from a number of offices, workplaces, universities and resident areas in Kuala Lumpur and Petaling Jaya.

The completed questionnaires were collected between 7-14 days later. The data collection stretched over a period of 6 weeks, in the months of June and July 2000.

### Data Analysis Techniques

The data analysis process involved editing, coding, carrying out consistency checks and finally summarizing the findings. The Statistical Package for Social Sciences (SPSS) program was used in data analysis.

The first part of the analysis provides a summary of the general demographic characteristics of the respondents; frequency counts and percentage were obtained. Subsequently, hair characteristics, unaided brand awareness, usage patterns and purchasing patterns were analyzed.

The next area of interest in the analysis is the measurement of the respondents' product performance evaluation. Mean scores were found to be useful statistical tools for this purpose. The ANOVA was engaged to test for significant differences among the ethnic groups.

Finally, to identify the factors considered important in influencing consumers' choice of brand, the absolute mean score for each factor was compared along the five-point scale. To define if differences in mean scores were due to actual difference between groups or resulted by chance, the mean scores of ethnic groups for each factor in terms of importance in influencing

choice of brand were tested by using ANOVA. The level of significance was set at 0.05; that is the difference between the ethnic groups will be considered as actual (not resulted by chance) if there is only a 5% or less possibility that the differences occur by chance.