CHAPTER 4

RESEARCH METHODOLOGY

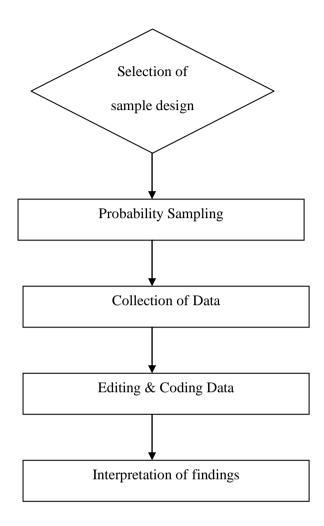
4.0 Introduction

This chapter presents the methodological approach of the study. It begins with discussion on research design of the study which is mainly quantitative approach. The, the study discusses about the research instruments, scales and measurements, sampling method and questionnaire design. A summary will be concluded in this chapter.

4.1 Research Design

After identifying the variables in problem situation and developed the conceptual framework (see Chapter 3), the next step is to design the research in a way that the requisite data can be gathered and analysed to arrive at a solution. A proper planned research design is important in order to ensure the accuracy, confidence and generalizability of the study. The generalised research process can be explained as in Figure 4.1 below (adapted from Zikmund, 2003).

Figure 4.1: Generalised Research Process (adapted from Zikmund, 2003)



The sampling design chosen for this study is random sampling for all Malaysian higher education students that are located in Klang Valley. The research strategy is quantitative approach, which is moving towards as positivism paradigm. Positivism is an approach to social research that seeks to apply the natural science model of research to investigation of social phenomena and explanation of the social world (Denscombe, 2003).

The reason of using only quantitative approach in this study is to find out the relationship and determine the effect of the variables and advertising appeals to consumer's intention to purchase. The survey instruments are derived from the well established journals and the previous literatures. Besides, the survey involves with only primary data obtained directly from the respondents.

4.2 Research Instruments

A structured questionnaire is used as the main instrument in this survey (See Appendix A). This questionnaire is a pre-formulated written set of questions to which respondents record their answers and usually within rather closely defined alternative. Questionnaire method is chosen because it is an effective data collection mechanism where the researcher knows exactly what is required and how to measure the variables of interest. Other than that, this method of data collection offers some advantages such as quick response rate, cheap, east to organize and well structured.

The questionnaire is used to measure the relationship between attitude and consumer's purchase intention and between subjective norm and consumer's purchase intention after being exposed to two different print advertisement that use fear and sex appeal.

4.2.1 Scale and Methods

The 40 items out of 64 items of the independent variables are measured based on a five-point Likert type scale, ranging from "strongly disagree, "disagree", "neutral", "agree" and "strongly agree". Subjects are asked to express agreement or disagreement of a five-point scale. Each degree of agreement is given a numerical value from one to five. Thus, a total numerical value can be calculated from all responses. The scale is also used to measure dependent variable in determining the intention of consumer to purchase the products featured in the advertisement, with five items respectively.

Another 24 items of the independent variables are measured based on semantic differential scale. Twelve bipolar attributes are identified at the extremes of the scale and respondents are asked to indicate their attitudes and assessment, on what may be called a semantic space, toward the two print advertisements. The responses can be plotted to obtain a good idea of consumer's perception on the advertisement.

All the scales used in the questionnaire are carefully selected from the previous established scales in the same context. However, the scales have been modified according to the local context. Five Likert-scale is chosen to measure IV and DV as it able to tap the differences in the variable (Sekaran, 2003). Table 4.1 presents the summary of research instruments, sources and the questionnaire format.

Table 4.1: Summary of Types of Variables, Section of Questionnaire and Sources

Type of Variables	Section of	Sources
	Questionnaire	
Independent Variables (IV)	Part A, Section A	Wells, 1964
Independent Variables (IV)	Part A, Section B and	Hyllegard, 2009
	Part B, Section A	Icek Ajzen, 2001
Dependent Variable (DV)	Part A, Section C	Hyllegard, 2009

4.3 Questionnaire Design

For this study, the questionnaire is divided to two parts as listed below:

1. *Part A:*

Assessment of the two print advertisements, measurement of consumer's belief strength, belief evaluation and normative belief and also consumer's intention to purchase.

2. *Part B*:

Measurement of motivation to comply, characteristics of the respondents and demographic profile.

Part A consists of sections as listed below:

1. Section A: Assessment of the print advertisement

Twelve bipolar attributes are identified at the extreme of the scale, and respondents are asked to indicate their assessment on the two print advertisements. The bipolar adjective used are Unappealing-Appealing;

Inappropriate-Appropriate; Ineffective-Effective; Unethical-Ethical; Uninformative-Informative; Disinteresting-Interesting; Untruthful-Truthful; Unconvincing-Convincing; Offensive-Not offensive; In poor taste-In good taste; Stale-Fresh and Washed out-Sharp.

2. Section B: Measurement of belief strength, believe evaluation and normative belief

Five items are assigned to each variable, making it in total fifteen items for each advertisement. The measurement is adopted from Icek Ajzen, 2001 and Hyllegard, 2009 but is modified to suit the study accordingly. The variables are based upon the Theory of Reasoned Action.

3. Section C: Intention to purchase

Five items are also assigned to this variable and the measurement is taken from Hyllegard, 2009.

Part B consists of sections as listed below:

1. Section A: Measurement of motivation to comply

Five items are assigned to the variable and the measurement is adopted from Icek Ajzen, 2001 but is modified to suit the study accordingly. The variable is based upon the Theory of Reasoned Action.

2. Section B: Characteristics of respondent

Additional questions are asked on the consumer's pre-awareness on the products featured in the two print advertisements. In addition, there is measurement on the consumer's preference for product's attributes.

3. Section C: Demographic information of respondent

Demographic items such as gender, ethnicity, religion, level of education, nature of work, level of income and age are included in order to make more meaningful analysis.

4.4 Sampling Method

The sampling procedure that adopted in this research is simple random sampling method. This method is chosen because every element in the population (higher education students) has a known and equal chance of being selected as the sample. According to Uma Sekaran (2003), simple random sampling has the lease bias and offered the most generalization. In order for this study to become more representative, it is important that the right method is chosen.

The target sample is students of higher education located at the Klang Valley. Klang Valley is chosen as it has the highest concentration of universities and colleges in Malaysia. The respondents are selected from a number of universities mainly University Malaya, University Putra Malaysia, University Kebangsaan Malaysia, Multimedia University, and a few other private colleges within Klang Valley such as

Stamford College, Help University College and Limkokwing University of Creative Technology. Besides, the survey only covered Malaysian and all the foreigners are excluded from this study.

Questionnaires are distributed mainly through student web portal and circulated physically, i.e. printed, and face-to-face or drop off and collected later. Respondents are allowed to take home the questionnaire and submit it upon completion within one week. This lead to approximately 250 printed questionnaires that are sent to potential respondents and questionnaire distributed to student web portals covers the whole student population in the respective universities and colleges.

The rationale for using university students as subjects has been a research method practiced overseas for many years, mainly for their accessibility to the researcher and homogeneity as a group (Calder et al., 1981). Student samples have already been used in the studies mentioned previously by Rehman and Brooks (1987), Tinkham, and Weaver-Larisey (1994). Many studies have used student samples and justified their use in similar attitude research by arguing that there is little difference between student attitude towards advertising and beliefs and those of other segments of the population (Andrews, 1989; Pollay and Mittal, 1993; Ramaprasad and Thurwanger, 1998).

Other than that, surveying university students about their behavior related to apparel consumption is a common practice in academic research (e.g., Ha and Lennon, 2006;

Valor, 2007; Belleau et al., 2007). This is because college students spend a higher percentage of their discretionary incomes on apparel than do other segments of the population and because they tend to be concerned about issues pertaining to the marketing of apparel and other consumer goods i.e. helmet (Alloy Media Marketing, 2006; Cone Inc., 2006).

4.5 Data Analysis

The questionnaires collected are screened manually to weed out any incomplete response conducted. Statistical analysis of the data collected from the survey is then accomplished by using the Statistical Package for Social Science program (SPSS) Windows Version 17.0. Data then are screened and cleaned in order to check out the outliers and missing value. Besides, data analysis techniques used in this study are normality test, reliability test, factor analysis, T-Test, Pearson Correlation, simple and multiple regression.

Normality test is performed at the beginning stage by using SPSS software in order to determine whether the variables are normally distributed and also to determine whether parametric or non-parametric test could be used in this study. Please refer to Table 4.2 for details. Regression analysis is also performed by using SPSS in order to evaluate the prediction of a dependent variable from one or more independent variables. In this study, simple linear and multiple linear regressions with stepwise method are used. Simple linear regression is a linear regression in which there is only one covariate (predictor variable) and is used in situation to evaluate the linear

relationship between two variables. Meanwhile, multiple linear regressions are an extension of bivariate correlations in which there are several independent variable involved. Pearson correlation method is also applied in the study to explore the strength of the relationship between two continuous variables. This gives researcher an indication of both the direction (positive or negative) and the strength of the relationship. T-Test is used to compare means between assessments of the two print advertisements by respondents as to find out the difference in attitude towards the two advertisements. Summary of data analysis used in this study are listed in the Table 4.2 below:

Table 4.2: Summary of Types of Analysis Used

	Analysis
rt B, Section B:	To understand the
naracteristics of respondents,	consumer profile
d	and the
	characteristics
rt B, Section C:	
emographics Profile	
rt A, Section A: Assessment	To ensure that the
print advertisement,	data collected are
	normally distributed
rt A, Section B:	
elief Strength, Belief	
valuation and Normative	
elief,	
rt A, Section C:	
rchase Intention, and	
rt B, Section A:	
otivation to Comply	
	aracteristics of respondents, d tt B, Section C: mographics Profile tt A, Section A: Assessment print advertisement, tt A, Section B: lief Strength, Belief aluation and Normative lief, tt A, Section C: rchase Intention, and tt B, Section A:

Validity Test	Factor Analysis	Part A, Section A: Assessment of print advertisement, Part A, Section B: Belief Strength, Belief Evaluation and Normative Belief, Part A, Section C: Purchase Intention, and Part B, Section A:	To ensure that all the variables are not correlated to one another
		Motivation to Comply	
Reliability Test	Cronbach's Alpha	Part A, Section A: Assessment of print advertisement,	To ensure the scale of measurement are reliable
		Part A, Section B:	
		Belief Strength, Belief	
		Evaluation and Normative	
		Belief,	
		Part A, Section C: Purchase Intention, and	
		Part B, Section A: Motivation to Comply	
Bivariate	Pearson	Part A, Section A: Assessment	To understand on
and Multiple	Correlation and Multiple	of print advertisement,	the relationship between IV
Analysis	Regression	Part A, Section B:	(attitude and
		Belief Strength, Belief	subjective norm)
		Evaluation and Normative	and DV (intention
		Belief,	to purchase) and the effect of gender to
		Part A, Section C:	the correlation
		Purchase Intention, and	
		Part B, Section A:	
		Motivation to Comply	

T-Test	Paired-	Part A, Section A: Assessment	To compare the
	Samples T	of print advertisement,	evaluation or
	Test		attitude of
			respondents
			towards the two
			appeals advertising

4.6 Conclusion

This chapter has linked up the research questions that are developed and the research methodology that is to be deployed to measure the variables in the study. This chapter also discussed the research design, sampling and survey method, questionnaire and the data analysis method.

Following that, Chapter Five will discuss about the demographic of the respondents and to identify the significance of each of the hypotheses as stated in Chapter Three.