## **CHAPTER 3: METHODOLOGY**

This chapter first introduces the research design, conceptual model and hypotheses to be tested. Then in the later part, the questionnaire design and measurement of the research variables, sampling and data analysis procedures are being described.

#### 3.1 Research Design

The research adopted in this study is a descriptive research where the study is undertaken to describe the factors determining Malaysian buying intention and the meaningful relationship between all the constructs with the exposure of two kinds of print advertisement. The two advertisements are from the same global brand, however they are from different approaches (standardised versus the adapted advertisements). Cross-sectional study was conducted via questionnaire survey to take a snapshot of the population at a point in time as the research is studying based on existing consumers' attitude and not on the impact of before and after a customer is being exposed by the advertisements.

The research strategy is a quantitative approach, which is also referring to a positivism paradigm. Positivism is an approach to social research that seeks to apply the natural science model of research to investigations of social phenomena and explanations of the social world (Denscombe, 2003). The

research framework is derived from previous literatures and this study seeks to investigate and explain the model in advertising response in Malaysia context.

# **3.2 Conceptual Framework**

Based on the literatures presented in Chapter 2, a conceptual model has been developed which consists of the two independent variables (IV) which they are brand familiarity and execution styles, with a mediator (M) of advertising liking and lastly the dependent variable (DV) of customers' buying behaviour. The model focuses on the factors influencing customer buying behaviour the most among all the variables. The model is summarized as in Figure 3.2 below:

# Figure 3.2

# Research Framework



#### 3.3 Research Hypotheses

As discussed in the literature review of Chapter 2, brand familiarity does play a crucial role in influencing consumers' decision (Holden and Rutz, 1992) and in Arora and Stoner's (1996) study, greater brand familiarity could enhance consumers' intention in purchasing especially in automobile insurance and photocopying services for their case. Brand attitude is defined as an essential link between a brand and a purchase motivation which was caused by advertising (Rossiter and Percy, 1991).

Nonetheless, it is explained that advertising for familiar brands may achieve different effect compared to the unfamiliar brands (Machleit, Allen and Madden, 1993). However, the purpose of exposure for the familiar brands would be more as a reminder and to update consumers' existing knowledge since they are already familiar with the brand (Snyder and Stukas, 1999). In spite of that, it is said that once consumers are familiar or loyal to a brand, it may be difficult to change their perception or attitude towards the brand (Hoyer and MacInnis, 1997). As a consequence, the first hypothesis is stated as follows:

H1: Brand familiarity has a positive influence on consumers' favourable attitude towards print advertisement.

Refer to Chapter 2, cognitive reactions towards the advertisements are more affected by non-emotional appeals, however most studies shows that positive emotional appeals lead to positive brand and advertisement responses (De

Pelsmacker et al., 1998). Furthermore, some researchers have reported that a particular type of emotional appeal (humour) provided more favourable responses in the case of existing products or brands (Yi, 1990; Chattopadhyay and Basu, 1990; Weinberger and Gulas, 1992).

Even for new brands, it is supported that non-emotional context would be more appropriate to get good responses (Yi, 1993; Perry et al., 1997; De Pelsmacker et al., 2002). Besides that, there are also some researchers suggested that informational advertisements can create favourable response when there is picture effect provided in the advertisements even though the picture element does not carry much importance (Laskey, Seaton and Nicholls, 1994). Therefore, it is concluded that execution style does influence consumers' advertisement liking which second hypothesis is proposed as below:

H2: Execution style has a positive influence on customers' favourable attitude towards the print advertisement.

Advertisement liking as discussed in Chapter 2, it is essential to understand the differences in consumers' learning and thinking pattern across countries as it is important in developing successful campaign, which would influence consumers' way of processing information and respond to advertisements (De Mooji, 1998). Consumers' feeling toward the advertisement no matter favourable or unfavourable, would definitely influence their respond towards the advertisement (Metha and Purvis, 1995).

An outdoor (billboard) advertising study has reported that consumers with positive attitude toward the advertisement would be able to recall the advertisement than consumers which had negative attitude (Donthu, Cherian and Bhargaya, 1993). In addition, study done by Haley and Baldinger (1991) has also shown that commercial liking (similar to attitude-toward-the-ad) is the strongest predictor of sales in advertising. Nevertheless, consumers normally would already have their brand attitude and purchase intent towards certain brands, therefore it is difficult to separate them and to even change them (Machleit, Allen and Madden, 1993).

Empirical studies have proposed that advertising messages do influence consumers' attitude toward the advertisement which eventually affect the brand attitude and purchase intention (Lutz, MacKenzle and Belch, 2001). Grisaffe and Kumar (1998) have pointed out that there are two possible behavioural intentions in customer value which they are, consumers' likelihood to recommend a brand to others and likelihood to repurchase the brand. In light of the above researches, the third hypothesis is proposed as below:

H3: Consumers' attitude towards the print advertisement mediates the relationship between communication processing (brand familiarity and execution styles) and purchase intention.

However, in a global context, studies have been done on consumers' perception, attitude and purchase likelihood towards global brands (Steenkamp, Batra and

Alden, 2003; Tasoluk, 2006). The studies shown that consumers perceived global brands as superior brands even though the reality quality and value of the brands are not objectively superior (Shocker, Srivastava and Ruekert, 1994; Kapferer, 1997; Keller, 1998). Steenkamp et al., (2003) found that global brands significantly increased consumers' purchase intention through their perceived brand quality and prestige which is shown in their studies done on consumers' in United States and South Korea.

Nonetheless, there are researchers argued that local consumers' attitude (purchase intention) would be more favourable towards adapted campaign than standardised (Onkvisit et al., 1999). Nevertheless, these favourable attitude do not always lead to purchase as for example, Giges (1992), found that European favour their local commercials, but they prefer to purchase foreign brands. Therefore, the entire hypothesis above will be tested on two advertisements which the adapted advertisement as Advert A and the standardised advertisement as Advert B; to measure its relationship with all the variables mentioned.

## 3.4 Questionnaire Design and Construct Measurement

Structured questionnaire was developed to obtain the responses from respondents about their opinions on the research variables. The questionnaire of this study consists of four variables: "brand familiarity (5 items)", "execution styles (21 items)", "advertising liking (7 items)" and "buying intention (4 items). The

variables mentioned above are operationalized in current research whereby the measurement items are totally adapted according to the previous researches with respect to consumers' response and advertising setting. The measurement items are then rephrased so that all items are reasonable to be applied on advertising response and the questionnaire structure is provided in the Appendix D.

### 3.4.1 Brand Familiarity

Brand familiarity is operationalized into 5 questionnaire items which was adopted from De Pelsmacker et al. (2005) and Oliveira et al. (2008) study. Respondents are asked to indicate their level of agreeableness on their brand familiarity towards the advertisements given. These measurement items are measured in seven-point Likert scales ranging from strongly disagree (=1) to strongly agree (=7) and are listed in Table 3.4.

## 3.4.2 Execution Styles

To measure respondents' perception towards execution styles of the print advertisements provided, 21 questionnaire items based on measurements developed by Puto and Wells (1984). These 21 measurement items are divided into two dimensions: (1) informational ad content, (2) transformational ad content. All the items are measured by seven-point Likert scales ranging from strongly

disagree (=1) to strongly agree (=7). The execution styles' questionnaire items are exhibited in Table 3.4.

#### *3.4.3 Attitude towards the Advertisement*

To measure respondents' advertising liking towards the print advertisements, this study has adopted a total of 7 questionnaire items from De Pelsmacker et al. (2005) study. These 7 measurement items are grouped into two dimensions: (1) attitude towards the advertisement feeling; (2) attitude towards the advertisement understanding. Seven-point Likert scales are employed to evaluate advertising liking. Respondents are asked to indicate their level of agreement toward each statement, from strongly disagree (=1) to strongly agree (=7). The questionnaire items for attitude towards the advertisement are listed in Table 3.4.

## 3.4.4 Purchase Intention

Buying intention questionnaire items were adopted from De Pelsmacker et al. (2005) study as well and it consists of 4 items which are used to measure respondents' buying intention towards the advertisements. Seven-point Likert scales, rating from strongly disagree (=1) to strongly agree (=7) are used to measure these 4 items. The questionnaire items for purchase intention are presented in Table 3.4.

## 3.4.5 Information of Respondents

In order to obtain respondents that are frequently exposed to advertisements to evaluate the questionnaire, information regarding the advertisements exposure is captured in this section. The respondents are asked about whether they are an existing magazine reader to ensure that the study involve experienced respondents. Information pertaining to the frequency of reading of magazines, list of magazines read, the last time reading the magazines and what purposes that they are looking for are being asked.

Besides that, the different demographic of the respondents are also captured in this study. The questionnaire items pertaining to respondents are contained in the last section of the questionnaire and are categorized into the following:

- 1. Gender of the respondent
- 2. Age of the respondent
- 3. Ethnicity of the respondent
- 4. Education level of the respondent
- 5. Occupation of the respondent
- 6. Income level of the respondent
- 7. Marital status of the respondent

Table 3.4

# Measurements of Research Variables

Variable	Measurement Items	Literature Based
Brand Familiarity	1. Is the brand well known	Oliveira et al. (2008)
	<ol> <li>I have a positive attitude towards this brand</li> <li>This brand looks attractive</li> <li>I would recommend this brand to others</li> <li>This brand is really something for me</li> </ol>	De Pelsmack er et al. (2005)
Execution Styles	<ol> <li>Informational         <ol> <li>I learned something from this ad that I did not know before about (this brand)</li> <li>There is nothing special about (this brand) that makes it different from the others</li> <li>The ad did not teach me what to look for when buying (this brand)</li> <li>This ad was very uninformative</li> <li>This ad reminded me of some important facts about (this brand) which I already knew</li> <li>I can now accurately compare (this brand) with other competing brands on matters that are important to me</li> <li>I would have less confidence in using (this brand) now than before I saw this ad</li> </ol> </li> </ol>	Puto and Wells (1984)
	<ol> <li>Transformational</li> <li>The ad did not seem to be speaking directly to me</li> <li>While I looked at this ad, I thought of how this brand might be useful to me</li> <li>This ad was meaningful to me</li> <li>(This brand) fits my lifestyle very well</li> <li>I could really relate to this ad</li> <li>Using (this brand) makes me feel good about myself</li> <li>It's hard to give a specific reason, but somehow (this brand) is not really for me</li> </ol>	Puto and Wells (1984)

Table 3.4 continued

Variable	Measurement Items	Literature Based
Execution Styles	<u>Transformational</u>	Puto and
	8. The ad did not seem to be speaking directly to me	Wells
	9. While I looked at this ad, I thought of how this brand might be useful to me	(1984)
	10. This ad was meaningful to me	
	11. (This brand) fits my lifestyle very well	
	12. I could really relate to this ad	
	13. Using (this brand) makes me feel good about myself	
	14. It's hard to give a specific reason, but somehow (this brand) is not really for me	
	15. This ad did not really hold my attention	
	16. If I could change my lifestyle, I would make it less like the people who use (this brand)	
	17. When I think of (this brand), I think of this ad	
	18. I felt as though I were right there in the ad, experiencing the same thing	
	19. This ad did not remind me of any experiences or feeling I have had in my own life	
	20. It is the kind of ad that keeps running through your head after you have seen it	
	21. It's hard to put into words, but this ad leaves me with a good feeling about using (this brand)	
Attitude towards	Attitude towards the Advertisement Feeling 1. The advertisement is beautiful	De Pelsmack
the	2. The advertisement attracts attention	er et al. (2005)
advertise- ment	<ol> <li>The advertisement is remarkable</li> <li>The advertisement is original</li> </ol>	(2003)

# Attitude towards the Advertisement Understanding

- 1. It is not immediately clear which brand is advertised
- 2. This advertisement gives useful information
- 3. The advertisement is confusing

Variable	Measurement Items	Literature Based
Purchase	1. Next time that I need such a product, I will choose	De
Intention	the brand in the ad	Pelsmack
	2. It is very likely that I will buy the advertised brand	er et al.
	3. If I saw this brand in a shop, I would buy it	(2005)
	4. It is a good decision to buy the advertised brand	

The detailed contents of the final form including the statement of the questionnaire items and the ranging or the scale are shown in Appendix D.

## 3.4.6 The Print Advertisements

The chosen print advertisements were done through a selection of print advertisements which includes a variety of product categories from different kinds of industries. However accordingly to Czinkota and Ronkainen (2007), consumer goods are tend to be adapted in their specific countries especially in the food industry. Therefore, after a thorough and deep discussion with the project paper's supervisor, Burger King brand with its standardised and adapted advertisements were chosen to be the print advertisements for this research project. The actual print advertisements can be seen in Appendix C.

## 3.5 Sampling

The sampling procedure that was adopted in this study for data collection was through questionnaire survey with a pre-planned sample size of 300 respondents. The questionnaire survey was distributed in Klang Valley, which is the most populous, urbanized and industrialized region in Malaysia with total population of 6.7 million in 2005 and expecting to reach 8.5 million by 2020 (Dali, 2008). Post-graduate students which majorities of them are full-time employees represent half of the total respondents, undergraduate students encounter for 10 percent of the respondents and the remaining (40 percent) were convenience respondents around Klang Valley. Even though universities students do not represent the exact population, however they are often used for a lot of crosscultural research (Erickson et al., 1984; Roth and Romeo, 1992; Martin and Eroglu, 1993) and they are said to be highly generalisable due to its diversity context in student population (Ozsomer, Bodur and Cavusgil, 1991).

Overall, from the total of 300 questionnaires distributed during a two weeks of data collection period, there were only 250 valid questionnaires that can be used for further analysis after excluding the incomplete answer. This represents a response rate of 83 percent in which it is still adequate to arrive at the desired and expected achievement of this study. Further discussion about the descriptive analysis of the samples characteristics were given in the next chapter.

## 3.6 Data Analysis Procedures

In order to achieve the purposes of this study and test the hypotheses, Statistical Package for Social Science (SPSS) 15.0 was used to analyze the collected data. The current research conducted the following data analysis.

#### 3.6.1 Pre-Analysis Data Screening

Preliminary analyses were performed to ensure there is no violation of the assumptions of normality and regression test. Normality test was performed to determine whether the variables are normally distributed, to remove extreme outliers and also to determine whether parametric or non-parametric test can be used in this study. Such normality test would include Skewness and Kurtosis, M-Estimators, Histogram and Box-Plot analysis.

As for regression test, assumption was performed to ensure that the data fit for regression analysis without any assumption violation. Those assumptions include the following:

- Ratio of cases to independent variables the number of cases needed for regression model should have 20 times more cases than the predictors.
- 2. Normality, linearity and homoscedasticity these assumptions assume that the differences between the obtained and predicted dependent variables scores are normally distributed and the residuals (independent variables) have a linear relationship with the predicted dependent variable scores. Residual scatter plot and residual normal plot are used to analyze these assumptions.
- 3. Multicollinearity and auto-correlation the assumptions here are the IVs must not be significantly correlated to avoid multicollinearity and there is no autocorrelation whereby the observations or values is independent (there are no systematic trend in the errors of the observation of the values).

Multicollinearity can be confirmed via Tolerance and Variance Inflation Factor (VIF) while auto-correlation is detected via Durbin-Watson statistic.

4. Multivariate outlier – extreme cases that have impact on the regression solution should be deleted or modified to reduce their influence. Multivariate outlier can be detected by using Mahalanobis Distance statistical test. The method involves comparison of the Mahalanobis distance with a critical value of chi-square.

### 3.6.2 Descriptive Statistic Analysis

To better understand the characteristics of the sample, descriptive statistics analysis was used to illustrate the respondents' characteristics and means and standard deviation of each variable.

## 3.6.3 Reliability and Validity Test

Reliability and validity are of vital importance in the measurement scales. Reliability analysis is a measure of the internal consistency of indicators for a construct (Hair et. al, 1998). The purpose of reliability analysis is to determine how well a set of items taps into some common sources of variance (Viswanathan, 2005), and is frequently measured with Cronbach's coefficient alpha. Cronbach's coefficient alpha is "the ratio of the sum of the covariances among the components of the linear combination (items), which estimates true variance, to the sum of all elements in the variance-covariance matrix of measures, which equals the observed variance" (Nunnally and Bernstein, 1994, p. 212).

Validity is the extent to which a scale or set of measures accurately represents the concept of interest. Content validity (Devellis, 2003, p. 49) was established during preparation of the questionnaire by using scales already validated in the literature, carefully analyzing the items. All the traditional measures are based upon previously validated measures (Venkatesh and Morris, 2000), and their reliabilities were considered acceptable.

Then, construct validity test was performed which consists of discriminant validity and convergent validity. Discriminant validity reflects the degree to which two conceptually similar constructs are distinct, and the correlation here should be low. Correlation analysis can be used to assess this type of validity. If the correlation result indicated that the correlation between variables were not higher than 0.8 (Bagozzi, 1994), this would conclude that the different constructs are not measuring the same thing.

Convergent validity refers to the degree to which the measures of the same construct are correlated, and the correlation here should be high. It can be assessed via confirmatory factor analysis (CFA) which is a common accepted method for this test (Netemeyer et al., 2002). CFA allows the researcher to verify the factor structure of a set of observed variables based on the existing

knowledge of the theory, empirical research, or both. If the measurement items of each construct have individual factor loadings at least 0.50 and all measurement items are significant (level of .01) for Bartlett's test of sphericity (Sanzo et al., 2003) and index for Kaiser-Meyer-Olkin (KMO) is at least 0.6 (Pallant, 2001), the scale is concluded has convergent validity.

#### 3.6.4 Multiple Regression Analysis

Multiple regression is used to account for (predict) the variance in an interval dependent, based on linear combinations of interval, dichotomous, or dummy independent variables (Garson, 2005). Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variable at a significant level (significance test of R square), and can establish the relative predictive importance of the independent variables (comparing beta weights) (Garson, 2005). Multiple regression analysis is used to test the proposed hypotheses on the constructs of brand familiarity, execution styles, advertising liking and buying intention. The regression analysis will determine which factors influencing the buying intention with the best predictor of consumer buying intention towards print advertising in Malaysia.

This chapter has accomplished in presenting the research design, conceptual model and hypotheses that were being tested. At the same time, the questionnaire design and measurement were also presented while sampling and data analysis procedures were described. Subsequently, data screening,

descriptive data of respondents and also data analysis are analysed in Chapter 4.