# CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in the proposed study. It comprises the information on the research design, framework, data collection, the measurements and data analysis techniques used.

3.2 Research Framework

Based on the related theories and literature presented in the previous chapter, a framework has been developed to investigate the relationship among perceived quality, brand awareness, brand association, brand loyalty and brand equity (see figure 3.1).

Figure 3.1: Research framework of sportswear brand equity
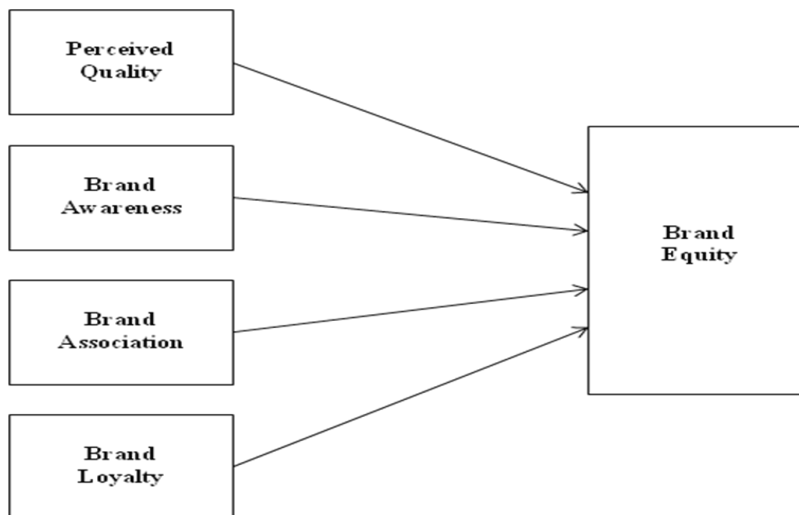
Source: Tong and Hawley 2009

3.3 Hypotheses Development

Based on the findings from previous studies, this study attempts to investigate the relationship between perceived quality, brand awareness, brand association and brand loyalty with brand equity. Therefore, the following hypotheses are formulated:

H1: Perceived quality has a significant positive impact on brand equity.

H2: Brand awareness has a significant positive direct effect on brand equity.

H3. Brand association has a significant positive direct effect on brand equity.

H4. Brand loyalty has a significant positive direct influence on brand equity.

3.4 Research Design

The research framework is designed to test the four hypothesized relationships in the sportswear industry in Malaysia. In this study, focus was in Kuala Lumpur as the population in this city will be more aware of the sportswear brand on study and will be more brand conscious. 180 questionnaires distributed to the respondents in the different places in Malaysia through e-mail, fax, post mail and face to face interviews. From 180 distributed questionnaires only received 171 questionnaires were received which were returned by the respondents after filling up the questionnaire. Out of the 171 respondents, only 165 of the data used as the other 6 responses were not valid. The data were collected over a period of 2 weeks.

The survey was conducted in 2 main shopping centers (1Utama and KLCC), universities/colleges, and a few public places in Kuala Lumpur city center through a convenience, non-probability sampling method. Local and international graduate students administered the surveys in the selected areas. Consumers who were visually

estimated to be 20 to 50 years old were approached and asked to respond to the questions. A token of smile from my sweet agents were offered with each questionnaire in order to increase the response rate, but participation was entirely voluntary.

3.5 Measurement Instrument

In this research, there are six sections of the questionnaire. The first section pertains respondents' demographic information such as:

- Gender

- Age

- Nationality

- Educational level

- Occupation

- Preference to buy sportswear

The second section is based on perceived quality which consisted of 3 items, third section is consisted of 3 items which is about the brand awareness, forth section is consisted of 4 items which is based on brand association, fifth section is consumer brand loyalty which is consisted of 5 items, and sixth section is consisted by 3 items which is based on overall brand equity of sportswear.

The survey questionnaire consisted of 18 items for measuring the dimensions of brand equity, and overall brand equity, as well as demographic questions. Brand equity items are developed from existing scales to measure the five constructs on a five-point

Likert scale (Sekaran, 2003) as in table 3.1.**The survey question is adopted from Tong and Hawley (2009) as in Appendix A.**

Table 3.1: Five point Likert scale

Levels	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

Source : Sekaran (2003)

3.6 Data Analysis Techniques

The measures used in the current research can be found in the Appendices. These measures are based on the literature and the sources are indentified in Appendices. All of the constructs were measured at the global level of analysis.

A number of statistical techniques were employed in the study, most of which are available through the SPSS statistical software package version 17.0. For example, descriptive measures and frequency analyses were conducted to identify miscodes and blunders, derive a description of the respondent pool, and to determine distributional properties of the scales used in the study. The research hypotheses were then tested by using Multiple Regression Analysis basising on t-value and p-value. The data was analyzed by reliability test, the Cronbach's Alpha is used to ensure the measures are free from error and produce consistent results. Factor Analysis was used in order to validity test of each constructs. In addition, the mean and standard deviation to

analysis the level of agreements on each sportswear brand based on the respondents were found in this analysis.

3.7 Conclusion

This chapter explained the research design, framework and hypothesis developed for this study, and an overview of the questionnaire was also discussed. This chapter also discussed the research instrument, measurements and data analysis techniques used to conduct the study. In the following chapter, the findings of the research will be discussed. It also identifies the significance of each of the hypotheses as stated in the next chapter.