

**Factors Influencing Consumer Intentions to Purchase  
Seasonally Discounted Reebok Athletic Footwear**

**A Dissertation submitted by  
Atasit Lorterapong, BBA, MBA**

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## **Abstract**

Sales promotions are one of the key promotional strategies that companies worldwide have used to stimulate consumers' behavioral responses, especially their immediate product interest and product purchase (Kotler 2000; Pelsmacker et al. 2001; Percy 1997; Schultz et al. 1998). An analysis of consumer characteristics and the influences those factors have on consumer responses to products promoted through sales promotional programs is required for developing appropriate sales promotional programs. This understanding should be developed at both the product category and the individual brand levels (Schultz et al. 1998).

A number of empirical studies have emerged investigating the influence of consumer characteristics on consumer responses to sales promotions; however, there is a notable lack of research focusing on consumers in Asian regions, and to examining consumer responses to non-grocery products (at the specific brand level) promoted through price discounting programs. This thesis addresses gaps in the literature by investigating the research problem:

*How do consumer characteristics influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market?*

To provide an answer to this research problem, the researcher reviewed the literature in relation to consumer characteristics and their influence on consumer responses to sales promotions. Two key behavior theories relevant to sales promotions: namely utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975) were discussed. A number of influential demographic, psychographic, and normative influencing characteristics relevant to these theories were identified and used to develop primary hypotheses depicting the influence of these factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market.

Next, a two-stage research design was implemented. In stage one, exploratory research with four knowledgeable persons, three executives from Reebok (Thailand) and one from Super Sports (the largest retail chain selling athletic products in Thailand), was undertaken using in depth interviews. This exploratory study aimed mainly to identify all possible consumer characteristics most relevant to the research context investigated.

Data collected from this stage of the research were analyzed using content analysis techniques. Findings of this research were enhanced with that from the review of literature in order to finally select a complete set of antecedent consumer characteristics and to propose a final set of hypotheses explaining the influence of these variables on purchase intentions. These hypotheses were tested in the stage-two research.

In stage two of this study, data were collected for testing the proposed hypotheses using the mail survey approach. Questionnaires were developed and sent to 1,600 individuals selected from the database of Super Sports, using a simple random sampling technique. A total of 554 valid questionnaires were returned resulting in a responses rate of 34.9 percent. The data were analyzed by SPSS using factor analysis and regression techniques.

In summary, the findings of this research indicated that demographics were not significant and did not impact both psychographic and normative influencing characteristics and purchase intentions. On the other hand, five specific psychographic and normative influencing characteristics were found to have an impact on purchase intentions and these variables included: deal proneness; value consciousness, price consciousness; attitudes of reference groups towards a purchase of seasonally discounted Reebok athletic footwear; and quality consciousness.

Deal proneness was seen to be the most important variable that had a positive influence on purchase intentions and it was followed by value consciousness, price consciousness, and 'attitudes of reference groups'. Quality consciousness was shown to be the least significant variable and it had a negative impact on this dependent variable. These findings support the literature indicating that psychographic and normative influencing variables are more influential than demographics in explaining consumer responses to products promoted through sales promotions. They also support the use of consumer characteristics relevant to utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975) as antecedent variables to explain the variance in consumer responses to sales promotions.

The key contributions of this research are discussed in chapter 6. The body of knowledge regarding consumer characteristics and the influence of these factors on

consumer responses to products promoted through sales promotions has been extended.

The findings of this research provide theoretical contributions by:

- using a comprehensive set of consumer characteristics relating to both the utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) as antecedent variables in this study;
- investigating associations between antecedent factors (demographic, psychographic, and normative influencing characteristics) in addition to the relationship between these variables and the dependent variable of purchase intentions;
- conducting this study in a research context rarely adopted by previous research; and
- using a probability sampling technique (the simple random sampling approach) for sample selection.

The results of this research also provide practical contributions to Reebok (Thailand) and Reebok retailers by:

- providing analytical information that helps these companies to understand how consumer characteristics influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, and this knowledge in turn will assist them to develop and implement price-discounting programs more effectively; and
- suggesting these companies to select appropriate product items (athletic footwear models) for the discounting programs and to develop media plans to expose the promotional events to target consumers in order to persuade these consumers to favorably respond to the discounting programs of Reebok athletic footwear.

This research also suggests future research to extend the knowledge relevant to this research area by:

- including additional relevant antecedent consumer characteristics into a research model; and
- comparing these findings with those of future studies that may conduct their investigations in different research contexts (for instance research undertaken with different rates of discounting programs, different athletic footwear brands, or different populations).

### **Certification of the Dissertation**

I certify that the ideas, research works, results, analyses, and conclusions contained in this thesis are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other reward, except where otherwise acknowledged.

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Signature of Candidate

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Date

Endorsement

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Signature of Supervisor/s

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Date

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Signature of Supervisor/s

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Date

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## Table of Contents

	Page no.
<b>Abstract</b>	i
<b>Certification of the Dissertation</b>	iv
<b>Acknowledgements</b>	v
<b>Table of Contents</b>	vi
<b>List of Appendices</b>	ix
<b>List of Figures</b>	xi
<b>List of Tables</b>	xiii

### CHAPTER ONE- INTRODUCTION

1.1 Background to the research	1
1.2 Research problem and objectives	4
1.3 Justification for the research	6
1.4 Methodology	11
1.5 Outline of the thesis	12
1.6 Definitions	13
1.7 Delimitations of scope	14
1.8 Conclusions	15

### CHAPTER TWO- LITERATURE REVIEW

2.1 Introduction	16
2.2 Sales promotions	16
2.2.1 Theories of consumer behavior applied to sales promotion	21
2.2.2 Dominant Theories (utility theory and the theory of reasoned action)	30
2.3 Consumer characteristics and their influences on consumer responses towards sales promotions	46
2.3.1 Demographics	47
2.3.2 Psychographics and normative influencing factors	49
2.4 Preliminary hypotheses of consumer characteristics and their influences on consumer intentions to purchase the seasonally discounted Reebok athletic footwear	53
2.4.1 Key response variable: purchase intentions	54
2.4.2 Key consumer characteristics included in the preliminary hypotheses	57
2.4.3 Preliminary hypotheses	60
2.5 Conclusions	82

## **CHAPTER THREE- EXPLORATORY RESEARCH**

3.1 Introduction	85
3.2 Data collection and justifications	87
3.3 Analysis of findings	92
3.3.1 Overview of athletic footwear in the Thai market	94
3.3.2 Findings of interviews	96
3.4 Key influential consumer characteristics and hypotheses to be tested in the survey research	113
3.4.1 Consumer characteristics and the key response variables to be included in the survey research	113
3.4.2 Hypotheses to be tested in the survey research	117
3.5 Conclusions	125

## **CHAPTER FOUR- RESEARCH METHODOLOGY**

4.1 Introduction	127
4.2 Justification for the scientific research paradigm	129
4.3 Research design	131
4.4 Data collection methods	133
4.5 Sample design	137
4.5.1 Definition of the target population	138
4.5.2 Identification of the sampling frame	139
4.5.3 Selection of the appropriate sampling method	140
4.5.4 Determination of the necessary sample size and sample selection	143
4.5.5 Determination of quality issues	143
4.6 Operational definitions	144
4.7 Reliability and validity	151
4.8 Questionnaire design process	153
4.8.1 Sources of non-sampling error	153
4.8.2 Determination of scales and formats of measurement	155
4.8.3 Developing question wording	160
4.8.4 Determination of the questionnaire organization	164
4.8.5 Physical characteristics of the questionnaire	168
4.8.6 Pre-coding the questionnaire	170



4.9 Survey administration	171
4.9.1 Non-response error	171
4.9.2 Strategies to increase response rate	172
4.9.3 Non-response error assessment	174
4.10 Pretest	175
4.11 Data analysis procedures	176
4.11.1 Analysis of respondents	176
4.11.2 Data Preparation	177
4.11.3 Data analysis	179
4.12 Limitations	182
4.13 Ethical considerations	183
4.14 Conclusions	185
 <b>CHAPTER FIVE- DATA ANALYSIS</b>	
5.1 Introduction	186
5.2 Analysis of respondents	187
5.2.1 Characteristics of respondents	187
5.2.2 Assessment of the representativeness of the sample	189
5.2.3 Sample size	192
5.2.4 Assessment of non-response error	193
5.3 Data preparation	194
5.3.1 Data cleaning and screening strategies	195
5.3.2 Assessment of missing data, outliers, and normality	196
5.4 Descriptive analysis	202
5.5 Assessments of quality of the measurement	209
5.5.1 Initial factor analysis with all 41 items included	210
5.5.2 Confirmatory factor analysis for each construct	222
5.5.3 Data reduction methods	235
5.6 Test of hypotheses and assumptions of regression models	237
5.6.1 Key assumptions of the regression models	237
5.6.2 Results of the tests of the proposed hypotheses	239
5.7 Conclusions	279

## **CHAPTER SIX- CONCLUSIONS AND IMPLICATIONS**

6.1 Introduction	281
6.2 Conclusions regarding the research findings	284
6.2.1 Conclusions regarding the relationship between demographic and psychographic and normative influencing variables	286
6.2.2 Conclusions regarding the relationship between psychographic and normative influencing variables and purchase intentions	292
6.2.3 Conclusions regarding the relationship between all antecedent consumer characteristics and purchase intentions	296
6.2.4 Explanations for the conclusions	297
6.3 Conclusions in relation to the research problem and research objectives	301
6.4 Implications of the research findings	304
6.4.1 Theoretical implications	304
6.4.2 Practical implications	308
6.5 Limitations of this research	312
6.6 Implications for future research	314
6.7 Conclusions	316
<b>List of references</b>	317
<b>List of Appendices</b>	
Appendix 3.1 Key interview questions in exploratory research	331
Appendix 3.2 Definitions of variables used in the exploratory research	333
Appendix 3.3 Behavioral frameworks of the influences of factors on consumer responses to price-discounted athletic footwear brands used in exploratory research	335
Appendix 4.1 Cover letter to prospective respondents for mail survey research	336
4.1.1 The first follow-up letter	338
4.1.2 The second follow-up letter	339
Appendix 4.2 Questionnaire used in the survey research	340

Appendix 5.1 Chi-square test for the representativeness of the sample gender, marital status, and education	348
Appendix 5.2 Comparisons between early and late responses on gender, age, education, employment status, managerial position, marital status, and monthly family income	349
Appendix 5.3 Comparisons of mean ranks between early and late responses on family size, and psychographic variables	352
Appendix 5.4 Normal probability plot and residual plot for hypotheses 1A, 1B, and 1C	353
Appendix 5.5 Normal probability plot and residual plot for hypothesis 2	354
Appendix 5.6 Normal probability plot and residual plot for hypothesis 3	355
Appendix 5.7 Normal probability plot and residual plot for hypothesis 4	356
Appendix 5.8 Normal probability plot and residual plot for hypothesis 5	357
Appendix 5.9 Normal probability plot and residual plot for hypothesis 6	358
Appendix 5.10 Normal probability plot and residual plot for hypotheses 7A and 7B	359
Appendix 5.11 Normal probability plot and residual plot for hypothesis 8	360
Appendix 5.12 Normal probability plot and residual plot for hypotheses 9A and 9B	361
Appendix 5.13 Normal probability plot and residual plot for hypotheses 10A, 10B and 10C	362
Appendix 5.14 Normal probability plot and residual plot for hypotheses 11A to 11K	363
Appendix 5.15 Normal probability plot and residual plot for hypothesis 12	364

## LIST OF FIGURES

	<b>Page no.</b>
<b>Chapter 1</b>	
Figure 1.1 Conceptual outline of thesis	13
<b>Chapter 2</b>	
Figure 2.1 Outline of chapter 2	17
Figure 2.2 The Fishbein-Ajzen Attitude Model	43
Figure 2.3 The influence of income on price consciousness	63
Figure 2.4 The influence of gender on deal proneness	64
Figure 2.5 The influence of education on need for cognition	64
Figure 2.6 The influence of education on variety seeking	65
Figure 2.7 The influence of education on quality consciousness	65
Figure 2.8 The influence of age on market (price) mavenism	66
Figure 2.9 The influence of employment status and age on 'motivation to conform'	67
Figure 2.10 The influence of age and education on time pressure	68
Figure 2.11 The influence of gender on impulsiveness	68
Figure 2.12 The influence of type of residence and education on perceived inventory space	69
Figure 2.13 The influence of gender on shopping plan	69
Figure 2.14 The influence of education on shopping enjoyment	70
Figure 2.15 The influence of psychographic and normative influencing factors on the purchase intentions	72
<b>Chapter 3</b>	
Figure 3.1 Outline of chapter 3	87
Figure 3.2 The influence of age and marital status on value consciousness	119
Figure 3.3 The influence of age on brand loyalty	120
Figure 3.4 The influence of family size and marital status on price consciousness	120
Figure 3.5 The influence of 'managerial position' on 'motivation to conform'	121
Figure 3.6 The influence of education and age on innovativeness	121
Figure 3.7 The influence of innovativeness on purchase intentions	122
<b>Chapter 4</b>	
Figure 4.1 Outline of chapter 4	128
Figure 4.2 Stages in Selection of a Sample	138
Figure 4.3 Questionnaire design process	154
Figure 4.4 Question sequence	166
Figure 4.5 Data preparation and analysis	177

## **Chapter 5**

Figure 5.1 Outline of chapter 5	186
Figure 5.2 Gender distribution of the sample versus the database	189
Figure 5.3 Marital status distribution of the sample versus the database	190
Figure 5.4 Education distribution of the sample versus the database	191
Figure 5.5 Boxplot identifying outliers for the variable of family size	200
Figure 5.6 Model depicting the influence of psychographic and normative influencing factors on purchase intentions	258
Figure 5.7 Inter-correlations of psychographic and normative influencing variables	259
Figure 5.8 Model depicting the influence of all significant consumer characteristics on purchase intentions	277

## **Chapter 6**

Figure 6.1 Outline of chapter 6	281
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## LIST OF TABLES

	<b>Page no.</b>
<b>Chapter 1</b>	
Table 1.1 Summary of hypothesis statements	5
<b>Chapter 2</b>	
Table 2.1 Major consumer promotion tools	20
Table 2.2 Theories of consumer behavior applied to sales promotion	23
Table 2.3 Summary of findings of studies into consumer responses to sales promotions	25
Table 2.4 Descriptions of utility concepts	32
Table 2.5 Summary of studies covering consumer characteristics and their influence on consumer responses to products promoted through sales promotions	35
Table 2.6 Factors influencing a consumer's decision process	47
Table 2.7 Factors found to be influential in explaining consumer responses to sales promotions	58
Table 2.8 Summary of preliminary hypothesis statements	61
<b>Chapter 3</b>	
Table 3.1 Exploratory research techniques and their key characteristics	88
Table 3.2 Summary of questions relevant to objectives of the exploratory research	91
Table 3.3 Schedule of the exploratory research	92
Table 3.4 Summary of meanings of characteristics of text content	93
Table 3.5 Target consumers of three major athletic footwear brands	95
Table 3.6 Summary of respondent opinions of factors influencing consumer responses to price discounted athletic footwear brands	97
Table 3.7 Summary of opinions of respondents	107
Table 3.8 Summary of antecedent influential factors to be examined in the survey research	114
Table 3.9 Summary of hypotheses to be tested in the survey research	123
<b>Chapter 4</b>	
Table 4.1 Comparison of four alternative paradigms	130
Table 4.2 Summary of characteristics of research designs	132
Table 4.3 Description of survey research approaches	134
Table 4.4 Description of each criterion used for survey approach selection	135
Table 4.5 Relative advantages and disadvantages of survey approaches	135
Table 4.6 Description of probability sampling tools	142
Table 4.7 Concepts and operational definitions used in this thesis	146
Table 4.8 Sections that discuss non-sampling errors	154
Table 4.9 Scales and types of measurement used to measure demographic data	158

Table 4.10 Possible biases with close-ended questions	159
Table 4.11 Principles to follow for designing the wording of questions in this study	162

## Chapter 5

Table 5.1 Profile of respondents	188
Table 5.2 Chi-square tests for non-response error (early vs late respondents)	193
Table 5.3 Mann-Whitney U tests for non-response error (early vs late respondents)	194
Table 5.4 Summary of dummy variables	196
Table 5.5 Summary of responses received and missing data for each item	198
Table 5.6 Summary of skewness and kurtosis statistics	201
Table 5.7 Summary of means and standard deviations for psychographic, normative influencing and purchase intention variables	204
Table 5.8 Correlation matrix of all items measuring psychographic and normative influencing constructs	212
Table 5.9 Total variance explained by the extracted factors	216
Table 5.10 Pattern matrix for all 41 indicators measuring psychographic and normative influencing variables	217
Table 5.11 Factor correlation matrix	219
Table 5.12 Correlation matrix of the measures of market (price) mavenism and innovativeness	220
Table 5.13 The results of Bartlett test of sphericity for the correlation matrix and the test of Kaiser-Meyer-Olkin	223
Table 5.14 Summary of confirmatory factor analysis for price consciousness	224
Table 5.15 Summary of confirmatory factor analysis for deal proneness	224
Table 5.16 Summary of confirmatory factor analysis for need for cognition	225
Table 5.17 Summary of confirmatory factor analysis for market (price) mavenism	226
Table 5.18 Summary of confirmatory factor analysis for quality consciousness	226
Table 5.19 Summary of confirmatory factor analysis after deleting item(s) measuring quality consciousness	228
Table 5.20 Summary of confirmatory factor analysis for value consciousness	229
Table 5.21 Summary of confirmatory factor analysis for loyalty to other athletic footwear brands	230
Table 5.22 Summary of confirmatory factor analysis for variety seeking	230
Table 5.23 Summary of confirmatory factor analysis for innovativeness	231
Table 5.24 Summary of confirmatory factor analysis for 'motivation to conform'	232
Table 5.25 Summary of confirmatory factor analysis for 'attitudes of reference groups'	233
Table 5.26 Summary of confirmatory factor analysis for 'attitudes of reference groups' with item 3.28 omitted	234
Table 5.27 Summary of factor scores using principle component analysis	237

Table 5.28 Multiple regression analyses for hypotheses proposing the influence of demographic variables on psychographic and normative influencing variables	240
Table 5.29 Correlation matrix (income, family size, and price consciousness)	243
Table 5.30 Correlation matrix (age, marital status, and value consciousness)	246
Table 5.31 Correlation matrix (age, education, and innovativeness)	247
Table 5.32 Correlation matrix (managerial position, age, employment status, and ‘motivation to conform’)	249
Table 5.33 Summary of the results of hypothesis testing in relation to the effect of demographic on psychographic and normative influencing variables	251
Table 5.34 Summary of hypotheses of the effect of psychographic and normative influencing variables on purchase intentions	252
Table 5.35 Correlation matrix (all 11 psychographic and normative influencing variables, and purchase intentions)	254
Table 5.36 Multiple regression analyses for hypotheses proposing the influence of psychographic and normative influencing variables on purchase intentions	256
Table 5.37 Summary of the results of hypothesis testing in relation to the effect of psychographic and normative influencing variables on purchase intentions	257
Table 5.38 Correlation matrix (including all demographics, psychographics, normative influencing variables and purchase intentions)	262
Table 5.39 Partial correlations and stepwise estimations for hypothesis 12 (testing the effect of all demographic, psychographic and normative influencing variables on the dependent variable of purchase intentions)	271

## **Chapter 6**

Table 6.1 Comparisons of the results of this research to that of previous studies	285
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## **CHAPTER 1**

### **Introduction**

#### **1.1 Background to the research**

Sales promotion is a key element of the marketing mix for many consumer products worldwide in an attempt to stimulate consumer purchases (Schultz, Robinson & Petrison 1998). Over time, the budget allocated to sales promotions has been rapidly growing (Ailawadi et al. 2001; Blattberg & Neslin 1990; Garretson & Burton 2003) with marketers shifting their attentions more to the use of sales promotions than to the use of advertising (Gilbert & Jackaria 2002). Increased media costs have been cited as being the main factor in this change of emphasis (Lichtenstein, Netemeyer & Burton 1995; Shimp 1990). The increasing use of sales promotions has influenced consumers to become more deal prone than in the past, and this in turn has forced marketers to rely more on sales promotions in order to respond to this consumer behavior trend, and to keep their consumers from competitors' products (Lichtenstein & Burton 1997; Stafford & Stafford 2000).

In Thailand, sales promotion has also become a key marketing activity employed by many companies to maintain their sales volumes during economic fluctuation periods (Jitpleecheep 2003; Thai Farmers Research Center 2003). The economic crisis which commenced in mid-1996 as a result of: the exceptionally high rate of economic growth for many years driven by foreign investment and exports; the excessive short-term borrowing from external sources by the financial and corporate sectors; diversification of a number of firms from their core business to riskier ones; and the over investment in unproductive sectors formed a crisis for many Thai financial institutions (SCB Research Institute 1998; Bank of Thailand 1998).

As a result, fifty-six finance and securities companies were closed down by the order of the Bank of Thailand. The government policy on floating of Thai currency in July 1997 resulted in a sharp and steady weakening of the Thai baht. Moreover, the increase of value added tax rate from 7% to 10% in August 1997 pushed prices of all products up. The economic stagnation and high employment rate constrained consumer spending even further (SCB Research Institute 1998). Most companies experienced falling sales due to the lower buying power of consumers and the strong competition. This recession

forced companies to review their marketing strategies and saw the adoption of more sales promotional activities, especially price-oriented sales promotions, to maintain revenues (Thai Farmers Research Center 1998).

During this economic crisis, Thai consumers became very price conscious. Less than half of Thai consumers reported buying based on brand-name recognition and first time buyers relied tremendously on the price of products alone when making a purchase decision (U.S. Embassy in Thailand 2000). The retail sector in Thailand has increasingly become very competitive. A number of large foreign discount chain stores, such as Big C, Tesco Lotus, Carrefour, and Macro, have successfully entered the Thai market due to their ability to sell low priced products to Thai consumers (Thai Farmers Research Center 2001).

Accurate information relating to the proportion of budgetary allocation to sales promotions does not appear to be readily available. However, corresponding advertising spending in the Thai retail sector in 1998 dropped from the previous year by 25.6 % (Thai Farmers Research Center 1999). Leading retail businesses in Thailand such as Central, the Mall, Emporium, and Robinson, shifted their spending from advertising to price-discounting programs ranging from 15-60% discounts (Thai Farmers Research Center 1999), and they generally used discounting campaigns much more often than in the past (Thai Farmers Research Center 2000) in order to stimulate consumer purchases across all product categories sold in their stores. Many forms of discounting programs are commonly used by retailers including special, seasonal or occasional sales (Thai Farmers Research Center 2001; U.S. Embassy in Thailand 2000); stamp collection; discount coupons; rebates; free gifts (Thai Farmers Research Center 2001); and loss leader pricing (Rungfapaisarn 2001).

The Thai economy bottomed out in late 1998, and positive growth has begun since 1999 due to the major economic policy strategies implemented by the Thai government. These strategies included, for example, farm debt restructuring, village funds, advice and support provided to Thai small and medium enterprises, and overall economic restructuring (U.S. Embassy in Thailand 2002). As a result, most major sectors of the economy have recovered from their sharp decline (U.S. Embassy in Thailand 2002).

However, the recovery of the Thai economy has been in the introductory stage. It has still been affected by a slowing global economy, caused by different events over the past few years. For example, the September 11<sup>th</sup> terrorist attacks (U.S. Embassy in Thailand 2002), the war in Iraq, and the spread of Sars disease (Thai Farmers Research Center 2003). Within these recent years, it appears that price discounting programs are still a key promotional tool that major leading retailers have used in conjunction with other sales promotional strategies, such as marketing events, store renovations (Jitpleecheep 2001), and extensions of opening hours (Jitpleecheep 2003; Thai Farmers Research Center 2003), to maintain their sales volumes.

To be able to develop and target an appropriate sales promotional program to consumers, a company needs to identify its target audiences and understand why they respond to sales promotions (Schultz et al. 1998; Wakefield & Bush 1998). Early studies in this area explored a number of consumer characteristics that could be used to develop an understanding about deal prone consumers (for example Bawa & Shoemaker 1987; McCann 1974). More recent studies (for example, Ailawadi et al. 2001; Huff & Alden 1998; Lichtenstein & Burton 1997; Mittal 1994; Wakefield & Barnes 1996; Wakefield & Bush 1998) have then progressed to a theory adoption stage by applying specific consumer behavior theories, namely: utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975) to explain their research models. These studies have not only identified factors influential to the sales promotion process, but also provided a research framework depicting the influence of these factors on consumer responses to products promoted through sales promotions.

However, considering the global importance of sales promotions in the marketing mix of a number of products, there is a notable lack of research devoted to investigating consumer responses to sales promotions outside North America and Western Europe (Huff & Alden 1998). To fill this gap, this research will be conducted in the Asian region, particularly in Thailand, to understand the Thai consumers' responses to sales promotions and the factors that drive these responses.

## 1.2 Research problem and objectives

The purpose of this research is to investigate relevant consumer characteristics and the influence of these factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. The research problem addressed in this thesis is:

*“How do consumer characteristics influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market?”*

From the above research problem, following research objectives will then be addressed:

- To identify key consumer characteristics that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear;
- To determine how these characteristics impact consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

In order to gain a more detailed understanding of the theoretical constructs involved in this research, we begin with a review of the literature (chapter 2), which will explore consumer characteristics identified in previous empirical research. The literature also provides a discussion of the key consumer behavior theories most relevant to this research topic, namely: utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975). Based on these theories and the review of the literature, preliminary hypotheses depicting the influence of consumer characteristics on consumer intentions to purchase the seasonally discounted Reebok athletic footwear will be developed in chapter 2 (section 2.4.3). Exploratory research will then be conducted to better understand influential factors most relevant to the context being examined in this study (chapter 3). The information gained from both the review of the literature and the exploratory research will be used to justify the selection of variables necessary to be included in this research, and the revision of the hypotheses to be tested, at the end of the chapter 3 (section 3.4.2).

In more detail, the concepts hypothesized to influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear include eight *demographic factors*, nine *psychographic factors*, and two *normative influencing factors*. *Demographic factors* are **age, gender, income, employment status, managerial position in the**

working organization, family size, marital status, and education. *Psychographic factors* consist of price consciousness, value consciousness, quality consciousness, price mavenism, loyalty to other athletic footwear brands, variety seeking, need for cognition, innovativeness, and deal proneness. Finally, *normative influencing factors* include motivation to conform to expectations of reference groups, and attitudes of reference groups towards a purchase of the seasonally discounted Reebok athletic footwear. The hypotheses are summarized in table 1.1.

**Table 1.1-Summary of hypothesis statements**

Hypothesis	Antecedent variables	Response variable	Expected relationships	Sources
H1	A: Income B: Family size C: Marital status	Price consciousness	A: Income will negatively influence price consciousness, B: Family size will positively influence price consciousness, and C: There is a difference in price consciousness across marital status.	The literature The exploratory research The exploratory research
H2	Gender	Deal proneness	Female consumers are more likely than male to be deal prone.	The literature
H3	Education	Need for cognition	Education will positively influence need for cognition.	The literature
H4	Education	Variety seeking	Education will positively influence variety seeking.	The literature
H5	Education	Quality consciousness	Education will positively influence quality consciousness.	The literature
H6	Age	Market (price) mavenism	Age will positively influence market (price) mavenism.	The literature
H7	A: Age B: Marital status	Value consciousness	A: Age will positively influence value consciousness, and B: There is a difference in value consciousness across marital status.	The exploratory research
H8	Age	Brand loyalty	Age will negatively influence brand loyalty (in specific, loyalty other athletic footwear brands).	The exploratory research
H9	A: Education B: Age	Innovativeness	A: Education will positively influence innovativeness, and B: Age will negatively influence innovativeness.	The exploratory research The exploratory research
H10	A: Employment status B: Age C: Managerial position at work	Motivation to conform to the expectations of reference groups	A: There is a difference in the level of motivation to conform to the expectations of reference groups across employment status, B: Age will negatively influence motivation to conform to the expectations of reference groups, and C: Managerial position will positively influence motivation to conform to expectations of reference groups.	The literature The literature The exploratory research

**Table 1.1- continued**

Hypothesis	Antecedent variables	Response variable	Expected relationships	Sources
H11	A: Price consciousness B: Deal proneness C: Need for cognition D: Market (price) mavenism E: Quality consciousness F: Value consciousness G: Brand loyalty H: Variety seeking I: Innovativeness J: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear, and K: Motivation to conform to the expectations of reference groups.	Purchase intentions	A: Price consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, B: Deal proneness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, C: Need for cognition will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, D: Market (price) mavenism will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, E: Quality consciousness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, F: Value consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, G: Brand loyalty will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, H: Variety seeking will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, I: Innovativeness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, J: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will positively influence consumers' purchase intentions, and K: Motivation to conform to the expectations of reference groups will negatively influence consumers' purchase intentions.	The literature and the exploratory research
H12	All eight demographic, nine psychographic, and two normative influencing factors	Purchase intentions	There will be no relationship between these antecedent factors and purchase intentions.	The literature and the exploratory research

Source: Table 3.9, developed for this thesis

### 1.3 Justification for the research

This research can be justified due to its theoretical and practical contributions to the body of knowledge. These justifications are addressed below.

**A lack of studies incorporating all relevant factors relating to both the utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) in their research.** Utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) are the key theories that can be used to explain the influence of consumer characteristics on consumer responses to products promoted through sales promotions. The focus of utility theory explains how consumers internally perceive and evaluate the value of a purchase based on what they gain and what they lose from that purchase (Thaler 1985).

The theory of reasoned action (Fishbein & Ajzen 1975) explains how consumers' perceptions and attitudes, as well as attitudes of reference groups towards performing specific behaviors, influence consumers' behavioral intentions and then actual behaviors. This theory also proposes that the researcher measures behavioral intentions, rather than actual behaviors, as the key response construct being directly influenced by perceptions and attitudes of consumers and reference groups. It explains that measuring the effect of consumers' attitudes and perceptions on actual behaviors may result in achieving biased research findings due to some other situational factors that researchers do not investigate, such as product unavailability (Blattberg & Neslin 1990; Hoyer & MacInnis 1997). Behavioral intention is an appropriate dependent construct to be investigated since it is the single best predictor of actual behavior (Peter & Olson 2002).

Regarding the reference groups, the theory of reasoned action (Fishbein & Ajzen 1975) suggests key additional factors that should be simultaneously explored, namely: motivation to conform to expectations of reference groups; and attitudes of reference groups towards performing that particular behavior.

In relation to this research topic, utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) will enable a connection to be made between consumer characteristics relating to demographics, psychographics, reference groups and the consumer response variables. However, previous studies have tended to investigate different discrete sets of consumer characteristics and have not included all potential relevant demographic, psychographic, and normative influencing factors at one time. This study will address this deficiency.

It appears that the only one study undertaken by Ailawadi et al. (2001) has included a comprehensive number of influential demographic and psychographic factors in relation to perceived utility in their research model. One of the key objectives of their research was to investigate the influence of these factors on consumers' store brand usage, and consumers' use of grocery products promoted through in-store (such as display), and out-of-store (such as coupons) sales promotions. A number of significant correlations between these antecedent consumer characteristics and response variables were found in their research and these will be further detailed in chapter 2.

The study by Ailawadi et al. (2001) tended to provide a clear portrait of the influence of consumer characteristic factors relating to utility theory on the consumer response variables investigated. However, from the point of view of the theory of reasoned action (Fishbein & Ajzen 1975), it appears that no previous study has simultaneously included motivation to conform to expectations of reference groups (Ailawadi et al. 2001) and attitudes of reference groups towards products promoted through sales promotions (Huff & Alden 1998) in their research models. Therefore, the effect of reference groups on consumer response variables is unlikely to be properly understood. In addition, the role of the behavioral intention, suggested by the theory of reasoned action (Fishbein & Ajzen 1975), has also been overlooked in the current research, which explores the influence of consumer characteristics on this construct.

This research aims to provide a more complete understanding of the influence of consumer characteristics on consumer responses to sales promotions, therefore, all relevant demographic, psychographic characteristics suggested as significant by previous research and the exploratory research, and the impact of reference groups will be covered simultaneously. This research will identify key influential consumer characteristics and determine the relative importance of these factors when they are incorporated together to explain consumer responses to the seasonally discounted Reebok athletic footwear.

This research also aims to reduce biased results that have previously existed due to the situational factors by investigating the influence of these consumer characteristics on behavioral intention rather than the actual purchase behaviors.



**Limited research investigating the relationship between antecedent consumer characteristics.** To gain a more complete understanding of how consumers respond to sales promotions, a research model should assist in not only identifying influential factors, but also in delineating the intervening mechanisms between the influential factors (Mittal 1994). However, most early studies tended to involve mostly exploratory research in attempting to identify influential factors. Few research outputs (such as Ailawadi et al. 2001; Huff & Alden 1998; Mittal 1994) focused their investigations on the intervening mechanism issue.

This research will fill this gap by investigating the relationship between antecedent consumer characteristics, namely: **demographics**; **psychographics**; and **normative influencing factors**, in addition to the influence of these factors on the **purchase intentions**.

**Research conducted in limited contexts.** Most of the previous studies (such as Bawa & Shoemaker 1987; Lichtenstein & Ridgway 1993; Mittal 1994; Narasimhan 1984a) have limited their investigations to consumers living in western countries (Huff & Alden 1998), to coupon redemption behaviors, or to grocery products (such as Ailawadi et al. 2001; Lichtenstein & Burton 1997; McCann 1974; Mittal 1994). To extend the body of knowledge of the sales promotion literature, this research will be undertaken within a different cultural context (Thailand) and in relation to a non-grocery product that is not mainly promoted through coupon sales promotions. To facilitate this, athletic footwear has been selected for this research as athletic footwear companies have continually and extensively employed price-discounting programs (Poojatkarn 23 Mar. 2001) in promoting their products.

**A lack of research studies using a probability sampling technique.** Few previous studies in this area have been found to employ a probability sampling technique (for instance Wakefield & Barnes 1996; Wakefield & Bush 1998) with most using a non-probability sampling technique, for example quota sampling (Huff & Alden 1998), judgment sampling (Blattberg et al. 1978; McCann 1974; Narasimhan 1984a), and convenience sampling (Ailawadi et al. 2001; Cho & Kang 1998; Mittal 1994).

Non-probability sampling techniques have resulted in samples being unrepresentative, which, in turn, has resulted in research findings being limited to just samples where the raw data in the surveys has been used (Zikmund 1997). Therefore, whether factors identified to be influential by these studies are also influential in explaining consumer responses to products promoted through sales promotions at the targeted population level is questionable. This research will attempt to address this shortcoming by employing a probability sampling technique, namely: simple random sampling. Using this sampling technique allows the researcher to gain reliable and valid results (Hair, Bush & Ortinau 2000), and then to be able to project research findings to the defined target population (Zikmund 1997).

**Practical contributions.** An analysis of consumer characteristics and the influence these factors have on consumer responses to sales promotions can assist companies in identifying target consumers and in turn, developing appropriate sales promotional programs to persuade those consumers to favorably react by buying the product (Wakefield & Bush 1998; Schultz et al. 1998). This understanding should be developed at both the product category and the individual brand levels (Schultz et al. 1998). However, it appears that past studies largely focused their research only at the product category level. There is a lack of research on this topic undertaken at a specific brand level.

This research will focus at the brand level and provide information about the analysis of consumer characteristics and the influences of these characteristics on consumers' purchase intentions in relation to the seasonally discounted Reebok athletic footwear. Findings from this research will enable athletic footwear companies and retailers in Thailand, particularly Reebok (Thailand) and Reebok retailers, to identify influential consumer characteristics, and to understand a level of importance in each factor. This knowledge is expected to enable them to develop more appropriate price-discounting programs, to select athletic footwear models for the discounting programs more appropriately, to develop media strategies for exposing the discounting programs, and finally to target those consumers who may react most favorably to these forums of sales promotion.

#### 1.4 Methodology

Due to insufficient knowledge about factors that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, specifically in Thailand, a two-step methodology will be taken in this research study. The first stage is exploratory research, which will be conducted to gain a better understanding about the research area being studied. The second stage is a descriptive survey, which will gather data for testing the research hypotheses. Each will be overviewed here.

**Exploratory research.** Exploratory research will be used initially to gain fundamental information to assist in identifying factors most relevant to the context being studied, and to better understand the potential influence of these factors on consumer responses to the seasonally discounted Reebok athletic footwear (Churchill 1995; Zikmund 1997). In addition, it will assist in confirming the use of purchase intentions as the key response variable to be researched in the second stage survey.

Data will be collected using in depth interview techniques. This data collection technique will be employed to gain insights into the relevant factors and their relationships to the consumer response variables (Churchill 1995). For this stage of research, target respondents should have a clear understanding of how psychological characteristics of consumers internally drive consumer responses to the seasonally discounted Reebok athletic footwear. Athletic footwear consumers have not been considered as the appropriate source of the data required because they are unlikely to be familiar with this complicated information, and in turn are unlikely to be able to give accurate opinions on this subject. Rather than gathering this information from athletic footwear consumers, these interviews will be conducted with key knowledgeable people who have been directly responsible for collecting and analyzing information regarding characteristics of consumers of Reebok and of other key athletic footwear brands from time to time, and they have frequently used this information in their marketing analysis work. There will be four respondents interviewed, including three executives from the marketing and sales department of Reebok, and one from the merchandising department of Super Sports, the largest retail chain of athletic products in the Thai market. Data collected will be manually coded and analyzed using content analysis. Findings of this exploratory research will be addressed in detail in chapter 3.

**The descriptive research.** A questionnaire will be developed from the literature and the exploratory research. A mail survey approach will be employed in this study as it will allow the researcher to collect a large amount of information used to test the hypotheses (Burns & Bush 1995; Hair et al. 2000). In addition, this approach is less expensive than many others (Kinnear & Taylor 1996).

Samples will be drawn using simple random sampling technique. Justifications of the use of both this survey approach and simple random sampling technique will be detailed in chapter 4. Data collected will then be analyzed using statistical tools, specifically exploratory and confirmatory factor analysis, and multiple regression analysis. The research methodology and research findings of this mail survey will be discussed in greater detail in chapter 4 and 5 respectively.

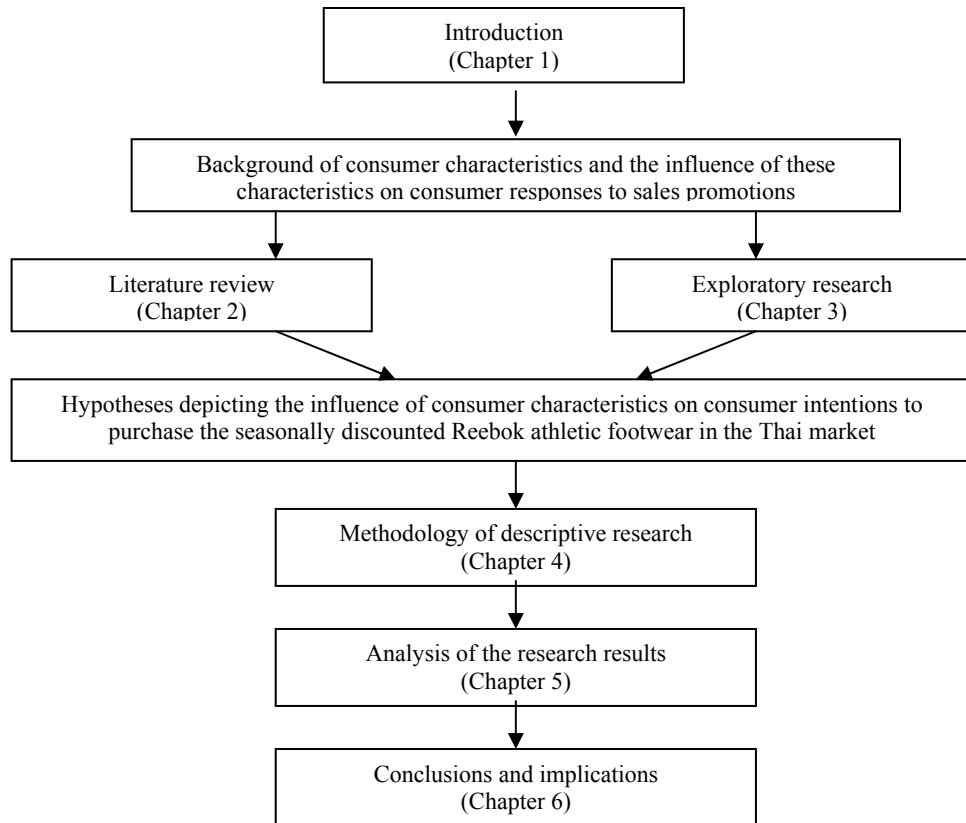
### **1.5 Outline of the thesis**

This thesis is structured into six chapters, as presented in figure 1.1. Chapter 1 provides an overview of the research problem, its justifications, methodology, and addresses the delimitations of the research. Chapter 2 provides a background of consumer characteristics and the influence of these characteristics on consumer responses to sales promotions by reviewing the key literature and disciplines relevant to this research area. Preliminary hypotheses depicting the influence of consumer characteristics on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market are proposed at the end of chapter 2, based on the review of the literature.

In chapter 3, methodology and findings of the exploratory research are discussed. The selection of variables to be investigated in this research is justified, and a final set of hypotheses to be tested is proposed at the end of this chapter. The methodology adopted for the stage-two descriptive research is justified in chapter 4.

Chapter 5 presents the analysis of the collected data, and addresses findings of this research. Finally, chapter 6 draws conclusions from the results of the analysis, discusses contributions for theory and practice, addresses limitations of this research, and finally suggests implications for future research.

**Figure 1.1 Conceptual outline of thesis**



Source: developed for this thesis

## 1.6 Definitions

Definitions adopted by researchers are often not uniform, so key and controversial terms are defined to establish positions taken for this research (Perry 1998). There are five key constructs used in this research and they include *demographics*, *psychographics*, *normative influencing factors*, *sales promotions*, and *consumer response to sales promotions*. *Demographic* and *psychographic characteristics* are likely to be generally acceptable terms and they therefore need no specific definitions. However, the terms used in this thesis for the remaining constructs are limited to a specific meaning. The meaning of these constructs is now addressed.

***Normative influencing factors.*** In this research, these factors are defined based on that given by the theory of reasoned action (Fishbein & Ajzen 1975). This term is used to categorize external factors that may have an influence on a consumer's decision-making processes (Hawkins, Best & Coney 1998; Mowen & Minor 1998). It mainly includes **attitudes or perceptions of reference groups of a consumer towards a purchase of**

**the seasonally discounted Reebok athletic footwear, and consumers' motivations to conform to expectations of reference groups** (Fishbein & Ajzen 1975).

*Sales promotions.* The term sales promotion is limited to the consumer-oriented sales promotion only for this research. It relates to short-term incentives that companies use to stimulate consumers to favorably respond to their products, such as buying their products (Kotler 2000; Pelsmacker, Geuens & Bergh 2001; Percy 1997; Schultz et al. 1998). This term will be adopted in this thesis from this point. This research focuses on **the 30 % seasonally price discounting program that Reebok has offered to its consumers.**

*Consumer responses to sales promotions.* In the literature, this term could be psychological or behavioral responses. Affect and cognition are two different types of psychological responses. Affect refers to feeling responses, such as having good feeling about a promoted product (Peter & Olson 2002). Cognitions are thinking responses, such as a consumer's evaluations or perceptions of promoted products (Peter & Olson 2002). Behavioral responses are actions consumers take against products promoted through sales promotions (Mowen & Minor 1998). For example, consumers may favorably react to a promoted product by purchasing it. This research investigates the **purchase intention** aspect of the consumers' behavioral responses.

### **1.7 Delimitations of scope**

There are delimitations for this study. Firstly, this study delimits to Thai consumers who have purchased athletic footwear at Super Sports (the largest retail store selling athletic products in Thailand), and have applied to be members of these stores. The ability to generalize findings of this research to other population, such as Thai consumers of other stores, or consumers in other countries, may be limited.

Secondly, our research is conducted during the economic fluctuation period. In this period of time, consumers may respond more favorably to the seasonally discounted Reebok athletic footwear than usual.

Finally, this study is descriptive research that examines the actual phenomenon. Other possible alternative explanations from other variables may not be completely ruled out

since all variables to be investigated are not manipulated as done in an explanatory study.

## **1.8 Conclusions**

Chapter one has provided an overview of this thesis. The research problem and objectives were introduced and they were to identify key consumer characteristics that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, and to determine how these factors impact this dependent variable of purchase intentions.

To achieve these research objectives, exploratory research and descriptive survey were proposed to be conducted and methodologies of this research were briefly justified. The thesis outline was given and definitions of the key constructs to be investigated in this research were addressed. The delimitations of this research were also discussed. On these foundations, the thesis proceeds to the next chapters commencing with a review of literature (chapter 2). The literature will mainly discuss the two key theories, namely: utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) as the parent discipline. It will also review findings of previous research identifying key antecedent factors relating to demographics, psychographics, and normative influencing characteristics and justifying the influence of these factors on consumer responses to products promoted through sales promotions, and propose preliminary hypotheses depicting the influence of these consumer characteristics on consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

## **CHAPTER 2**

### **Factors Influencing Consumer Intentions to Purchase The Seasonally Discounted Reebok Athletic Footwear**

#### **2.1 Introduction**

This chapter aims to provide a context for understanding the research issues and will develop elements of a research model in relation to consumer characteristics and the influence these factors have on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. The chapter is organized into six sections as illustrated in figure 2.1. In section 2.2, sales promotion is overviewed as the key parent discipline and is followed by the review of consumer behavior theories in relation to this research area, in particular utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975). Consumer characteristics found as one of the influential factors in the literature are then discussed in section 2.3. In section 2.4, preliminary hypotheses are developed to predict the relationship between consumer characteristics and consumer intentions to purchase the seasonally discounted Reebok athletic footwear, based on the research findings in the literature. Finally in this chapter, conclusions are drawn in section 2.5.

#### **2.2 Sales promotions**

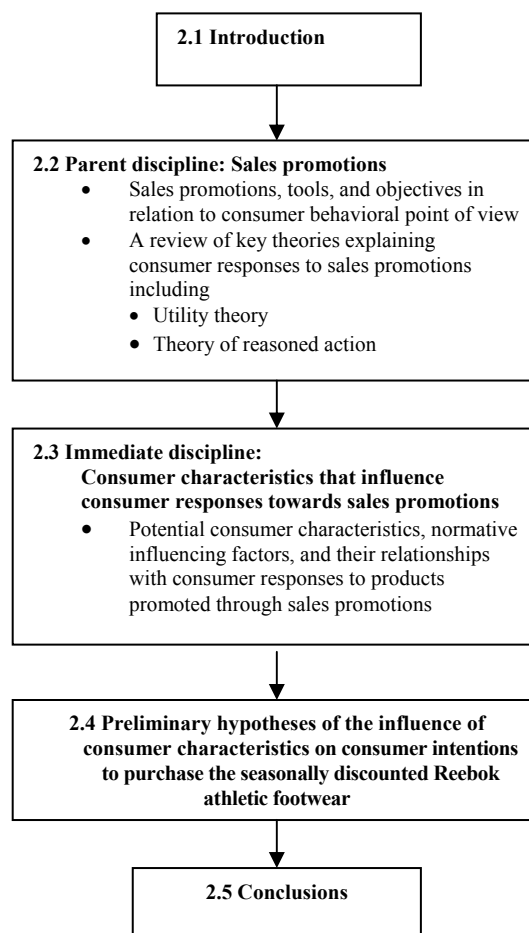
In addition to developing a good product, pricing it attractively, and making it accessible, a firm must communicate with potential stakeholders and the public using promotional activities (Kotler 2000). The main purpose of promotional activities is to deliver messages that assist in promoting a firm's product or the company as a whole, and persuading or influencing consumers' and stakeholders' attitudes as well as behaviors in a way that supports a company's business (Pelsmacker, Geuens & Bergh 2001).

Fundamentally, promotion involves five key elements, namely: advertising; public relations; personal selling; direct marketing; and sales promotions (Belch & Belch 1995; Boone & Kurtz 1998; Kotler 2000). Some additional elements such as: sponsorship; cause-related promotions (Pelsmacker, Geuens & Bergh 2001; Shimp 1997); point-of-purchase communications (Percy 1997; Shimp 1997); conventions and trade fairs (Percy 1997); are also considered to be promotional elements. However, this thesis views these



additional elements as extensions of the five key elements rather than as elements in their own right. Examples include sponsorship discussed as a part of the public relations strategy (Shimp 1997). Point-of-purchase communications and cause-related promotions are discussed as parts of the sales promotional tools (Schultz et al. 1998), and the Internet is a relatively new interactive medium that companies can use for implementing advertisements, sponsorships, or direct marketing (Pelsmacker et al. 2001). Thus, only those five key promotional elements (advertising, public relations, personal selling, direct marketing, and sales promotions) and the different roles that they play in assisting a company to achieve its communication objectives will be briefly reviewed in the following discussion, commencing with advertising.

**Figure 2.1**  
**Outline of chapter 2**



Source: developed for this thesis

Advertising is generally best employed to create brand awareness, and to inform or remind consumers about products through paid media such as television, magazines, and billboards (Belch & Belch 1995; Pelsmacker et al. 2001). Normally, advertising is targeted at a mass audience (Belch & Belch 1995). However, advertising has some limitations. For example, advertising is less likely to be used to create long-term goodwill or credibility of the company. In addition, advertising tends not to effectively attract particular groups of audience, such as stakeholders, opinion leaders, financial analysts, and investors, since these people are unlikely to be motivated by advertising messages (Pelsmacker et al. 2001). To overcome these drawbacks, other promotional strategies, such as public relations, are generally employed (Pelsmacker et al. 2001).

Public relations strategies are generally used to create a corporate image, goodwill, and credibility for companies and their brands, utilizing unpaid media, such as press conferences, and news releases (Boone & Kurtz 1998; Kotler 2000; Pelsmacker et al. 2001). Public relations might aim at different group(s) of audiences, such as target consumers, employees, stockholders, and other members of society, depending on the objectives of the organization and its communication strategy, the issue or the situation (Belch & Belch 1995; Boone & Kurtz 1998; Kotler 2000; Pelsmacker et al. 2001; Shimp 1993). In addition, many companies also use sponsorship of certain events, such as sporting events or music tournaments, as a key activity of their public relations campaigns. These activities are designed to relate their product image with events that their consumers like, and to create brand awareness (Belch & Belch 1995; Shimp 1993). However, when the focus of a promotional campaign is to generate sales, a company may then use personal selling, direct marketing, or sales promotions.

Personal selling is the only promotional element that allows companies to create face-to-face or interpersonal communications with their consumers (Boone & Kurtz 1998; Pelsmacker et al. 2001). Personal sales staff can assist consumers to learn about products, to identify problems, and to advance to purchases. They can also provide services after the purchase and they can bring back relevant consumer information to companies (Pelsmacker et al. 2001).

Direct marketing is an alternative promotional approach that companies can use to directly communicate to consumers without face-to-face contact. This direct

communication can be done through direct media such as mailings, catalogues, telephone calls, SMS messaging, faxes, emails, and brochures (Belch & Belch 1995; Boone & Kurtz 1998; Kotler 2000; Pelsmacker et al. 2001; Shimp 1993). In addition, direct marketing can be used to support the activities of the sales team, dealers, and retailers, or to create sales volume (Pelsmacker et al. 2001).

Sales promotions are the key promotional strategies that companies can employ to provoke consumers' behavioral responses, especially their immediate product interest and product purchase (Kotler 2000; Pelsmacker et al. 2001; Percy 1997; Schultz et al. 1998). In particular, sales promotion is a short-term incentive that companies use to stimulate intermediaries or consumers to buy their products (Kotler 2000; Pelsmacker et al. 2001; Percy 1997; Schultz et al. 1998). As this thesis focuses on sales promotions targeted to end consumers, the term 'sales promotion' will relate to consumer-oriented sales promotion only.

While the basic goal for sales promotions is to induce consumer purchases, companies might have a number of different promotional objectives for their brands. For example, obtaining trial and repeat purchases, or maintaining current consumers. Since not all sales promotional tools work in the same way, a range of promotional tools may need to be used (Schultz et al. 1998). They generally include tools such as price-offs, coupon redemption, refunds or rebates, premiums, bonus packs, sampling, contests and sweepstakes (Belch & Belch 1995; Blattberg & Neslin 1990; Boone & Kurtz 1998; Kotler 2000; Pelsmacker et al. 2001; Percy 1997; Schultz et al. 1998; Shimp 1993). In addition, some other essential tools, such as continuity programs (Pelsmacker et al. 2001; Schultz et al. 1998), specialty containers and cause-related promotions (Schultz et al. 1998) can also be employed. Table 2.1 summarizes these sales promotional tools, the objectives that they generally satisfy, and the authors who have proposed and researched them.

**Table 2.1- Major consumer promotion tools**

<b>Tools</b>	<b>Description</b>	<b>Key objective</b>	<b>Authors</b>
Price offs	Product package informs consumer that marked price is lower than regular price.	Franchise holding/loading	Schultz, Robinson & Petrison 1998; Shimp 1993, Belch & Belch 1995
Coupons	Certificate allowing consumer to get reduced price at purchase.	Franchise holding/loading for in and on pack coupons. Product trial for instant coupons, shelf-delivered coupons, media and mail-delivered coupons, scanner-delivered coupons	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Refunds and rebates	Consumer gets money back after purchase.	Franchise holding/loading Product trial	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Premiums	Gift given to consumer after purchase (Through free-in-the-mail premium) or at purchase (in-pack, on-pack, near-pack).	Franchise holding/loading for in, on, and near-pack premiums Product trial for free-in-the-mail premiums Image reinforcement for self-liquidating premiums	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Bonus packs	More product for the regular price	Franchise holding/loading	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Sampling	Product is given to consumers for free.	Product trial	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Contests	Consumers compete to win a prize. A purchase may be required.	Image reinforcement	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Sweepstakes	Consumer has a random chance to win a prize-no purchase required.	Image reinforcement	Schultz et al. 1998; Shimp 1993, Belch & Belch 1995
Continuity programs	Reward system for multiple purchases.	Franchise holding/loading Image reinforcement	Schultz et al. 1998; Shimp 1993
Special containers	Containers that can be reused or that add value to the product.	Franchise holding/loading	Belch & Belch 1995; Schultz et al. 1998
Cause-related promotions	Donation to charitable organization is made by company for each unit of product sold.	Franchise holding/loading	Schultz et al. 1998

Source: developed for this thesis from the authors cited

For example, to keep existing consumers from switching to other brands, franchising holding or loading tools, such as price-offs, in- and on- pack coupons, refunds/rebates, continuity programs, special containers, and cause-related promotions, could be

employed. These techniques also reward present consumers and encourage repeat purchases. Whereas instant coupons, shelf-delivered coupons, media-and mail-delivered coupons, scanner-delivered coupons, and free-in-the-mail premiums would be more appropriate for inducing product trials. In addition, particular sales promotional tools, called consumer-franchise-building-promotions (Belch & Belch 1995), including contests, sweepstakes, and self-liquidating premiums, could also assist in reinforcing brand image (Schultz et al. 1998; Shimp 1993). They communicate a brand's specific features and benefits; and therefore, contribute to the development of a favorable brand image (Belch & Belch 1995).

In planning and selecting an appropriate sales promotional program, not only an understanding about each promotional tool and its objective is necessary, but knowing the target audience or consumers specifically is also one of the most important tasks for companies (Wakefield & Bush 1998). As consumers respond to sales promotions differently (Schultz et al. 1998), it is important that companies can accurately identify the target consumers and in turn, develop the best sales promotional program to persuade those consumers to favorably react, for example, by buying the product. This process may be done through an analysis of consumer characteristics and the influences those factors have on consumer responses to products promoted through sales promotional programs. Without a theory to indicate which factors are most likely to influence consumer responses to promoted products, the researcher risks accepting spurious results (Blattberg, Buesing, Peacock & Sen 1978). Therefore, attention now turns to the review of consumer behavior theories that can be and have been applied to sales promotion.

### **2.2.1 Theories of consumer behavior applied to sales promotion**

There are a number of consumer behavior theories that can assist researchers to understand and explain how consumers are likely to respond to sales promotions. These theories can be divided into three broad categories, namely: behavioral learning theories; behavioral theories derived from internal cognition perspective; and theoretical models depicting how consumer perceptions translate into behavioral responses. Table 2.2 summarizes these theories with examples and an indication of their strengths and limitations. Some behavioral learning theories and some behavioral theories derived from internal cognition perspective, and relevant research studies, are overviewed in this

section to provide a theoretical background about a consumer's perceptual and behavioral responses to sales promotions. Then in the next section, the discussion turns to the theoretical models depicting how consumer perceptions translate into behavioral responses, in particular the two dominant theories that are directly related to this research topic, namely: the utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975).

Firstly, *behavioral learning theories* focus on the consumer's environment and behavior, but do not consider the inner cognitive process a consumer may undertake in the decision-making process (Blattberg & Neslin 1990). The Black Box model (Kotler 1965) is an example of the behavioral models developed to explain the influence that external or environmental factors have on consumer behavior, such as the influence of price, services, or promotions, on product choice, brand choice, or purchased product quantities. This model ignores internal cognitive factors as it views these as an impenetrable black box (Williams 1992).

In relation to sales promotions, this school of thought tends to view sales promotions as a reward (Rothschild & Gaidis 1981) that might generate immediate consumer response (Mowen & Minor 1998; Schultz et al. 1998). Most of the sales promotions tend to have a direct effect on the purchase stage of the buying-process since they alter the price/value relationship that the products offer to the consumers. This in turn results in consumers realizing a better deal and thus stimulates them to make a purchase (Schultz et al. 1998).

Behavioral learning theories have, over time, provided benefits to marketers because these theories are unsophisticated and provide practical but basic tools for marketing analysis. Research applying these theories views marketing activities as the stimulus factors that may have a direct effect on consumer behaviors. By evaluating the relative importance of stimulus factors, marketers can conveniently select the activity needed to influence consumer behavior in favor of their products (Williams 1992).

**Table 2.2- Theories of consumer behavior applied to sales promotion**

Group	Examples of theory	Key strengths	Key limitations
<p><b>I. Behavioral learning theories</b></p> <ul style="list-style-type: none"> <li>• Explain consumer behavioral responses to environments.</li> <li>• View promotions as a reward that can generate immediate consumer responses.</li> </ul>	<ul style="list-style-type: none"> <li>• Classical conditioning</li> <li>• Operant conditioning</li> <li>• Hullian model</li> <li>• Black box models</li> </ul>	<ul style="list-style-type: none"> <li>• Simple and easy to be used as a basis for analyzing consumer responses to sales promotions, and developing marketing tools</li> </ul>	<ul style="list-style-type: none"> <li>• More related to the context of low-involvement products where the internal cognitive process can be ignored</li> <li>• Ignore factors in relation to internal cognitive process</li> <li>• Does not provide a clear explanation of the influence consumers' internal factors have on consumer responses to sales promotions</li> </ul>
<p><b>II. Theories in relation to internal cognition</b></p> <ul style="list-style-type: none"> <li>• Explain how consumers respond to environment based on internal cognitive factors, such as perceptions, and evaluations of a marketing message</li> <li>• Consumers will favorably respond to a marketing message when perceiving net gain from that response.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognition, memory, and recall theories</li> <li>• Attribution and dissonance theories</li> <li>• Person perception theory</li> <li>• Object perception theory</li> <li>• Self-perception theory</li> <li>• Dissonance theory</li> <li>• Price perception theories</li> <li>• Weber's law</li> <li>• Adaptation-level theory</li> <li>• Assimilation-contrast theory</li> <li>• Perceived risk</li> <li>• Prospect theory and mental accounting</li> <li>• Utility theory</li> </ul>	<ul style="list-style-type: none"> <li>• Focusing on internal factors (i.e. consumer perceptions and evaluations) assists the researcher in explaining the influence consumer internal factors have on consumer responses to products promoted through sales promotions</li> </ul>	<ul style="list-style-type: none"> <li>• Provide an incomplete understanding about consumer responses to sales promotions due to an exclusion of particular external factors (i.e. normative influencing factors), which are closely related to certain internal cognitive factors</li> </ul>
<p><b>Theoretical model depicting how to consumer perceptions translates into behavioral responses</b></p> <ul style="list-style-type: none"> <li>• Models include consumer perceptions in their core, and also consider how perceptions translate into actual responses to environments</li> </ul>	<ul style="list-style-type: none"> <li>• Theory of reasoned action</li> <li>• Consumer decision-making models</li> </ul>	<ul style="list-style-type: none"> <li>• Consist of a variety of key constructs, such as perception, evaluation, attitude, normative influencing factors, behavioral intention, and actual behavior</li> </ul>	<ul style="list-style-type: none"> <li>• Behavioral intentions may not be used to fully predict actual behaviors due to some factors, i.e. intervening time, stability of intentions, unforeseen situation context</li> </ul>

Source: developed for this thesis from Blatberg & Neslin 1990

However, behavioral learning theories are unlikely to provide a complete explanation of consumer responses to sales promotions due to the exclusion of other important dimensions of consumer responses, in particular the internal cognitive process. Empirically, recent research in the sales promotion literature (such as Gupta & Cooper 1992; Krishna 1991; Webb & Mohr 1998) has been less likely to solely employ the concept of behavioral learning theories in investigating how consumers respond to

products promoted through sales promotions. These studies instead shift their attention more to the cognitive theories of consumer behavior. They support the use of consumer behavior theories in relation to internal cognition in explaining consumers' perceptions and behavioral responses to sales promotions. The internal cognitive theories are discussed next.

*Theories in relation to internal cognition* are concerned with the consumer perceptions that aim to explain what consumers think of and how they perceive stimulus. There are a number of cognitive theories employed by previous research, as addressed in column 2, Table 2.2. For example, memory and recall theories were employed in a study by Krishna (1991) explaining the effect of patterns (regular or irregular patterns) and frequency of price promotions on consumers' willingness to pay. This study found that an accuracy of consumers' recall of frequency or pattern of price promotion influenced their perceptions of promotional frequency or pattern. These perceptions in turn had an impact on consumers' evaluations of a price of the promoted grocery products that consumers were willing to pay (Krishna 1991).

Similarly, concerning consumer perceptions, Gupta and Cooper (1992) examined how consumers perceived and reacted to price reductions of athletic footwear. Attribution theory, adaptation level theory, and assimilation and contrast theory were adopted in their study to explain why consumers evaluated and then discounted price discounts prior to developing their intentions to purchase products. In addition, a more recent study has emerged using attribution theory in explaining that consumers were likely to find a reason about cause-related promotions. In turn, this perceived reason was found to have a positive effect on consumers' buying decisions in this study (Webb & Mohr 1998).

Key findings of research adopting behavioral learning and cognitive theories are summarized in Table 2.3. From this table, the first column identifies the main authors listed in chronological order. Column 2 and 3 indicate the types of sales promotions studied and base theories respectively, while the fourth column presents the research methods used. Key response constructs investigated are identified in column 5. Lastly, key findings are summarized in column 6.



**Table 2.3- Summary of findings of studies into consumer responses to sales promotions**

Authors	Type of sales promotion studied	Theories	Methodology/ Products studied	Key response constructs studied	Major findings
Krishna 1991	Price reduction	Memory and recall theories	Experimental research with undergraduate and graduate students  Product: Grocery products	Willingness to pay	<ul style="list-style-type: none"> <li>• Price consumers wanted to pay was more highly related with perceived deal frequency than actual deal frequency</li> <li>• Negative relationship of price to pay and perceived deal frequency when deals were regular and random.</li> <li>• Willingness to pay was correlated with actual deal frequency only when deals were regular</li> </ul>
Gupta & Cooper 1992	Price reduction	Attribution and information processing theory  Adaptation-level theory  Assimilation and contrast theory	Experimental research with graduate business students  Product: Athletic footwear	Perception and judgment  Purchase intention	<ul style="list-style-type: none"> <li>• The discounting of discounts and changes in purchase intentions depended on the discount level, store image, and type of product advertised (name or store brand)</li> <li>• Perceived discount was less than that in ad (consumers discounted the price discount)</li> <li>• The discounting of discounts increased with the increase in ad.</li> <li>• Consumers did not buy products unless the promotional discount was above a threshold level.</li> </ul>
Helsen & Schmittlein 1992	Price reduction	Reference price	Scanner panel data with households  Product: Grocery products	Purchase quantity  Purchase delay	<ul style="list-style-type: none"> <li>• Increase in consumer purchases</li> <li>• The more increase in depth of discount, the more forward buying was</li> </ul>
Cheong 1993	Coupon redemption	Utility theory	Surveys with shoppers  Grocery products	Purchase quantity  Amount of purchase  Price perception  Repeated purchase	<ul style="list-style-type: none"> <li>• Cent-off coupons increased the amount of items purchased but had no effect on the total amount spent by consumers.</li> <li>• A negative relationship between price perception of a brand on coupon and the use of coupon</li> <li>• Coupons decreased repeated purchase of the brand on coupon.</li> </ul>
Lichtenstein & Ridgway 1993	Sale event and coupon redemption	Attribution theory	Non-probability: convenience sampling  Survey method  Product: Grocery products	Price search  Responses to sale and coupon  Price recall	<ul style="list-style-type: none"> <li>• Low price search and Sale responsiveness were partly predicted by Coupon proneness, Value consciousness, Price consciousness, and Sale proneness.</li> <li>• Price recall was partly predicted by Value consciousness, Price consciousness, Sale proneness, and Price quality schema.</li> </ul>

**Table 2.3- continued**

Authors	Type of sales promotion studied	Theories	Methodology / Products studied	Key response constructs studied	Major findings
					<ul style="list-style-type: none"> <li>Coupon responsiveness was partly predicted by Coupon proneness, Sale proneness, and Prestige sensitivity</li> </ul>
Mulhern & Padgett 1995	Price reduction	Utility theory  Memory theory	Judgment sampling, in store survey with purchasers  Product: Home improvement products	Purchase intention	<ul style="list-style-type: none"> <li>Consumers bought products on promotion and regular price products.</li> <li>Consumers visiting the store for the promotion, purchased promoted products more than other shoppers</li> </ul>
Wansink 1996	Bonus packs	Attribution theory  Utility theory	Experimental studies with adults subjects from Parent-Teacher Association  Field study with shoppers  Product: Grocery products	Usage volume	<ul style="list-style-type: none"> <li>Increase in a package's size increased usage volume because consumers believed that larger packages were less expensive to use.</li> <li>At some point, the unit costs of a product had no impact on usage, and package size ceased to have any impact on usage</li> </ul>
Mela, Jedidi & Bowman 1998	Price reduction	Reference price  Utility theory  Behavioral learning process	Eight years of panel data with households  Product: Frequently purchased, non-food, consumer package-goods	Purchase intention  Purchase quantity	<ul style="list-style-type: none"> <li>The negative relationship between the increased long-term exposure of households to promotions and households' likelihood of making category purchases on subsequent shopping trips</li> <li>When deciding to buy, households bought more of a good.</li> </ul>
Chintagunta & Haldar 1998	Price reduction	Bivariate distribution	Experimental research with business undergraduate students  Grocery products	Purchase intention	<ul style="list-style-type: none"> <li>Price cut in one product category (i.e. pasta) increased the purchases of product in that category and related product category (i.e. pasta sauce).</li> </ul>
Chen, Monroe & Lou 1998	Price reduction	Attribution theory  Adaptation-level theory	Experimental research with business undergraduate students  Product: Computers and floppy disks	Perception  Purchase intention	<ul style="list-style-type: none"> <li>Buyers perceived a lower likelihood of permanent price reduction in coupon than in price discount promotions.</li> <li>Buyers had stronger intentions to purchase coupon-promoted products than the same product promoted by price discounts if the savings in both cases was the same and buyers incurred no extra efforts to redeem coupons.</li> </ul>

**Table 2.3- continued**

Authors	Type of sales promotion studied	Theories	Methodology/ Products studied	Key response constructs studied	Major findings
Raghubir 1998	Coupon redemption	Reference price	Experimental studies with students and employees of a university in Hong Kong  Product: Not specific	Price perception  Evaluation of promotion  Purchase intentions	<ul style="list-style-type: none"> <li>• Consumers used the value of a coupon to estimate price.</li> <li>• The higher the percentage discount, the higher the perceived price.</li> <li>• The higher the value of cents-off coupons, the higher the perceived price.</li> <li>• Price estimates were related directly to coupon values for both percentage-off and cents-off coupons</li> <li>• Larger discounts were more effective in improving deal evaluations and purchase intentions when price-related information was not presented and consumers had access to alternative sources of information.</li> </ul>
Wansink, Kent & Hoch 1998	Point-of-purchase promotions	Behavioral learning process	Field and lab studies with consumers and undergraduate students  Product: Grocery products	Purchase quantity	<ul style="list-style-type: none"> <li>• Point-of-Purchase anchors affected quantity decisions.</li> <li>• Multiple unit pricing generated higher increase in sales than did single-unit pricing.</li> <li>• Purchase restrictions increased the number of units a buyer purchased.</li> <li>• Anchors embedded in a suggestive selling slogan increased intended purchase quantities even when the price was not discounted.</li> </ul>
Webb & Mohr 1998	Cause-related promotions	Attribution theory	In depth personal interviews with varieties of consumers  Product: Not specific	Attitude	<ul style="list-style-type: none"> <li>• Half the samples expressed negative attitudes, stemmed from skepticism about implementation, cynicism about the firm's motives or both.</li> <li>• Most of respondents expressed an appreciation of company involvement in the program because it resulted in money being notated to support worthy causes.</li> <li>• Most samples had positive attitudes to non-profit organizations that participated in the promotional program.</li> <li>• Cause-related promotion had at least some impact on samples' buying decisions.</li> </ul>

**Table 2.3- continued**

Authors	Type of sales promotion studied	Theories	Methodology/ Products studied	Key response constructs studied	Major findings
Strahilevitz & Myers 1998	Cause-related promotions	Utility theory	Lab experiments and one field experiment with undergraduate students  Product: Various hedonic and practical products	Brand preference  Actual purchase	<ul style="list-style-type: none"> <li>Charity incentives were more effective with hedonic products than with practical products.</li> </ul>
Gedenk & Neslin 1999	Price reduction	Primary & secondary reinforcement  Attribution: self perception theory	Scanner panel data with households  Product: Yogurt and mineral water	Purchase intention  Purchase event feedback	<ul style="list-style-type: none"> <li>A negative (positive) relationship between in-store price promotions (non-price promotions i.e. features, or sampling) and purchase event feedback; effect of current purchases on future brand preference</li> <li>A stronger immediate effect of price promotions on brand purchase than non-price promotions</li> </ul>
Raghubir & Corfman 1999	Price reduction	Attribution theory  Cognitive response theory	Non-probability: convenience sampling: subjects randomly assigned to groups  Experimental research  Product: Dentist service, health club, and mutual fund industries	Evaluation	<ul style="list-style-type: none"> <li>Products were evaluated less favorably when they offered a price cut only when they had never offered a price cut in the past.</li> <li>Experts were less likely than novices to evaluate a brand unfavorably because it was promoted.</li> <li>Promotions were likely to result in negative evaluations when they were perceived as uncommon situation in that industry</li> </ul>
Sinha, Chandran & Srinivasan 1999	Price reduction	Adaptation-level theory	Field experiment with shoppers at city malls  Product: Airline ticket	Evaluation	<ul style="list-style-type: none"> <li>Consumers negatively evaluated promotional restrictions that they perceived as causing excessive inconvenience, or were misleading, or locking them into binding commitments.</li> <li>Negative evaluations appeared to worsen when restrictions were associated with a relatively more attractive price discounting.</li> </ul>

**Table 2.3- continued**

Authors	Type of sales promotion studied	Theories	Methodology/ Products studied	Key response constructs studied	Major findings
Ellen, Mohr & Webb 2000	Cause-related promotion	Attribution theory	Experimental research with non-traditional students  Products: Products from a grocery store and building supply store	Evaluation	<ul style="list-style-type: none"> <li>• Consumers evaluated a cause marketing offer more positively when it supported disaster rather than ongoing cause, the company was perceived as expending more rather less effort in its implementation</li> </ul>
Van Heerde, Leeflang & Wittink 2000	Price reduction	Economic perspective	Scanner panel data with households  Product: Grocery products	Purchase acceleration  Purchase quantity	<ul style="list-style-type: none"> <li>• The post-promotion dip did not exist.</li> <li>• Consumers accelerated their purchases, increased purchase quantity, which resulted in a dip in purchases in the weeks following a promotion.</li> </ul>

Source: Developed for this thesis from the authors cited

In brief, this section provided the overview of consumer behavior theory specifically as it relates to sales promotions. These theories can assist the researcher to understand how consumers perceptually and/or behaviorally respond to sales promotions. The literature also included the discussion of a number of studies applying these consumer behavior theories in explaining consumer responses to sales promotions.

Although these previous studies have provided a good foundation for the researcher to understand how consumers respond to sales promotions from both the cognitive and behavioral aspects, they have not yet provided a complete picture of consumer responses to sales promotions because they have not focused on the key antecedent factors that lead consumers to respond to a sales promotion. These factors could include both consumer demographic and psychographic characteristics. To fill this gap, the discussion now turns to the two dominant theories namely: the utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975), and reviews studies that have simultaneously investigated these consumer characteristics and the influence of these factors have on consumer responses to sales promotions.

### **2.2.2 Dominant Theories (utility theory and the theory of reasoned action)**

Unlike studies in the previous section, empirical studies examining consumer characteristics and the influence of these factors have on consumer responses to sales promotions tend not to completely proceed from a theoretical base (Blattberg & Neslin 1990) because there is not likely a theory that directly provides an explanation for this specific research phenomenon. Instead, research models developed in this area could be viewed more as the empirical building blocks of theory rather than theory testing (Blattberg & Neslin 1990). Dominant theories most commonly adapted by studies in this literature include utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975). These theories are now discussed.

#### **Utility theory**

When facing a sales promotional message, consumers will decide whether or not the product offering is worth accepting. Utility theory (Thaler 1985) discusses how consumers evaluate the value of a purchase of promoted products. Basically, consumers will compare what they would gain and what they would lose from purchasing a promoted product. The total value of a transaction to a consumer is the sum of acquisition utility and transaction utility (Thaler 1985).

Acquisition utility is the result of comparing the price paid for a product to its value. It represents the economic gain or loss from a purchase transaction (Thaler 1985). The perceived acquisition value of a product will be positively influenced by the benefits consumers believe they receive by acquiring and using it, and negatively influenced by the money or other things of value given up to acquire the product (Grewal et al. 1998). Specifically, acquisition utility is equal to the utility derived from the purchased product minus the price paid for that product (Thaler 1985).

In contrast, transaction utility is the result of comparing the price paid to a reference price. Consumers would feel pleasure (or displeasure) toward a particular sales promotion when a price paid for a product is below (or exceeds) the reference price (Thaler 1985). In evaluating a product's price, consumers may be exposed to, and use, information containing multiple reference points from a variety of sources (Kahneman 1992). A consumer's reference price might be based on the internal reference price that is the previous prices paid for the product. On the other hand, a consumer might choose

to use price information from external sources as a reference, such as the prices of all brands in the category at the point of purchase (Kumar & Karande 1998).

Price reductions enhance both acquisition and transaction utilities when the selling price is below the consumers' reference price and does not imply lower acquisition values (Chen, Monroe & Lou 1998). However, frequent price reductions would often reduce the perceived value of a product, possibly through the quality of the product and in turn decrease the reference price (Blattberg & Neslin 1990).

In addition, utilities a consumer could gain from a purchase of products promoted through sales promotions might be divided into two categories, namely: utilitarian (extrinsic); and hedonic (intrinsic) benefits (Chandon, Wansink & Laurent 2000). Utilitarian benefits are primarily instrumental, functional, and cognitive. Hedonic benefits are non-instrumental, and emotional (Chandon et al. 2000; Hirschman & Holbrook 1982).

Through these definitions, the savings, quality, and convenience benefits of sales promotions could be viewed as utilitarian, because these utilities help consumers increase the acquisition utility of their purchase and enhance the efficiency of the product purchasing experience. On the other hand, the value expression, entertainment and exploration benefits of sales promotions could be considered as hedonic, because these utilities are intrinsically rewarding and related to experiential emotions, pleasure, and self-esteem (Babin, Darden & Griffin 1994; Chandon et al. 2000).

Utility also involves the costs existing from a purchase of a promoted product. These costs include costs of switching, search costs, and inventory holding costs (Ailawadi et al. 2001). Descriptions of utility concepts are summarized in Table 2.4.

Utility theory is a fundamental theory extensively adopted by researchers (for example Ailawadi et al. 2001; McCann 1974; Mittal 1994; Narasimhan 1984a). This theory assists researchers to explain why consumers with different characteristics react differently to sales promotions, based on the concept of perceived utility. It suggests that consumers with particular demographic or psychographic characteristics are attracted to particular perceived benefits and costs (Ailawadi et al. 2001). Hence consumers with

different demographic or psychographic characteristics may differently perceive and evaluate benefits they may gain from a purchase of a product promoted through sales promotions. These different perceptions in turn influence consumers to differently respond to that promoted product.

**Table 2.4- Descriptions of utility concepts**

Utility	Descriptions	Sources
Monetary savings	The degree to which consumers perceive that they can save their money by purchasing a price-discounted brand.	Adapted from Blattberg & Neslin 1990; Chandon et al 2000
Perceived product quality	The degree to which consumers perceived a discounted brand as inferior in quality.	Adapted from Ailawadi et al 2001; Richardson, Dick & Jain 1994
Perceived value of promoted products	The degree to which consumers perceive that a price discount can help them maximize quality received for the price paid in a purchase transaction.	Adapted from Lichtenstein et al. 1990; and Tellis & Gaeth 1990
Improved convenience	The degree to which consumers perceive that a price discount can help them to reduce search and decision costs by providing consumers with an easy decision heuristic for a product purchase.	Adapted from Wansink, Kent & Hoch 1998; Ailawadi et al 2000
Costs of switching	The degree to which consumers feel risky or a high cost for substituting the discounted brand for the preferred brand.	Adapted from Blattberg & Neslin 1990
Inventory holding costs	The degree to which consumers perceive storage space availability.	Adapted from Ailawadi et al. 2001
Exploration	The degree to which consumers perceive that buying a price discounted brand helps them fulfill their own intrinsic needs for information, variety, and innovativeness.	Adapted from Baumgartner & Steenkamp 1996; Kahn & Louie 1990; Kahn & Raju 1991
Entertainment	The degree to which consumers have fun or feel enjoyable when watching or participating in particular sales promotions (such as sweepstakes, contests, and free gifts).	Adapted from Ailawadi et al. 2001 and Chandon et al. 2000
Value (self image) expression – Social affiliation	The degree to which consumers perceive that buying a price-discounted brand helps them earn social affiliation.	Adapted from Chandon et al.2000; Shimp & Kavas 1984; Shindler 1992

Source: developed for this thesis from the authors cited

For this thesis, utility theory suggests an approach for generating the relevant consumers' characteristics. It also provides a reasonable explanation on how these factors translate into consumers' intentions to purchase the seasonally discounted Reebok athletic footwear.

Researchers in the literature have employed utility theory differently over time. Early studies were likely to develop their research models based on the extrinsic benefit side of the utility theory, and to focus their investigations on the influences of demographic factors on response variables. For example, relationships of income, family size and



change in promotional activities were investigated by McCann (1974). Gender, employment, income, presence of children, cars and home owning were examined as to whether they affected consumers' deal proneness by Blattberg et al. (1978) and influences of income, education, and physical location on coupon use were studied by Narasimhan (1984a).

However, a research model developed by these early studies was unlikely to be a complete model due to the lack of other key influential characteristics, in particular psychographic and personality factors, that relate to both the extrinsic and intrinsic benefit points of view. With this limitation, early studies were unlikely to be able to provide consistent findings and could not yield a clear portrait of consumer responses to sales promotions (Ailawadi et al. 2001; Blattberg & Neslin 1990; Mittal 1994).

Similar uses of the utility theory also exist within the intrinsic benefit dimension. Some have used a psychographic focus relating to this utility dimension, such as price consciousness, enjoyment, fear of embarrassment (Huff & Alden 1998), variety seeking (Wakefield & Barnes 1996) and brand loyalty (Wakefield & Bush 1998). However, it has been unlikely to compare the findings of these studies due to their investigations using different sets of psychographic factors.

More recent studies (such as Ailawadi et al. 2001; Mittal 1994) attempted to fill gaps that exist in past studies by bringing together into their studies demographic and psychographic factors from both the intrinsic and extrinsic focuses. In particular, a study by Ailawadi et al. (2001) tended to apply the utility theory more completely than in the past. A number of influential demographic and psychographic factors that relate to the perceived extrinsic and intrinsic benefits were covered in their study, and it was found that a complete view of both extrinsic and intrinsic benefit dimensions from the utility theory provided a better explanation for consumer responses to products promoted through sales promotions (Ailawadi et al. 2001).

Table 2.5 summarizes the key findings of these empirical studies. The first column in Table 2.5 identifies the authors and the date of publication while the second column addresses the sales promotional tool studied. The third column identifies the base theory followed by the sampling technique and data collection method employed in column 4.

The fifth column addresses sample size, response rate, and product studied. The key research findings and main limitations of each study are presented in column 6 and 7 respectively.

In addition to consumer characteristics that relate to the utility theory, normative influencing factors, in particular reference groups, have also been shown to be determinant factors that may have an effect on consumer responses to products promoted through sales promotions. The most commonly employed theories that assist in explaining the influence of the reference groups on consumer responses to sales promotions is the theory of reasoned action (Fishbein & Ajzen 1975). This theory is discussed next.

### **Theory of reasoned action**

Theory of reasoned action provides an explanation of how attitudes predict behavior (Fishbein & Ajzen 1975). This theory specifies the linkage between consumers' beliefs or perceptions and their behaviors. It suggests that consumers' actual behaviors depend on their behavioral intentions. Intentions to perform a specific behavior can be determined as the outcome of consumers' attitudes toward performing that behavior and subjective norms concerning that behavior. In addition, consumers' attitudes towards performing that behavior are developed based on their own perceptions regarding that behavior. Subjective norms concerning that behavior are developed based on two constructs—namely: a consumer's perceptions of what he/she thinks his/her normative influencers want him/her to do, such as reference groups, and; motivation to comply with the expectations of normative influencers (Fishbein 1980; Fishbein & Ajzen 1975).

The entire model of the theory of reasoned action and relationships of its key constructs are illustrated in Figure 2.2. According to this model, people tend to perform behaviors that are evaluated favorably, and are congruent with normative influencers (Peter & Olson 2002).

**Table 2.5- Summary of studies covering consumer characteristics and their influence on consumer responses to products promoted through sales promotions**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
McCann (1974)	Promotional activities, not specified	Not specific	Non- probability: judgment sampling  Household purchase panel	Members of the Market Research Corporation of America  Products: 29 frequently purchased products from super markets	<ul style="list-style-type: none"> <li>• Consumers that purchased low priced products, or bought multiple brands, or had high income or small family size, or were deal prone responded to change in promotional activities</li> <li>• Consumers that seldom made multiple brand purchases were simply not as sensitive to changes in the level of brand dealing activities as those that made many multiple brand purchases. The small families were less sensitive to deal changes than larger families</li> </ul>	<p>Non- probability: judgment sampling makes sample unrepresentative</p> <p>Not concerning differences among segments defined in terms of more than one variable.</p>
Blattberg et al. (1978)	Deal not specified	Household inventory model based on the economic perspective	Non- probability: judgment sampling  Chicago Tribune Panel	Purchase data  Product: Five nonfood packaged goods	<ul style="list-style-type: none"> <li>• Deal prone consumers owned cars and homes, Female not working, Income and children were not clearly related to deal proneness</li> </ul>	<p>Non- probability: judgment sampling makes sample unrepresentative</p> <p>No statistical test of difference make results bias</p>
Narasimhan (1984a)	Coupon	The model of utility maximization, based on the economic perspective	Non- probability: judgment sampling  Diary panel data	Purchase records of about 1,000 consumers  Twenty grocery products	<ul style="list-style-type: none"> <li>• Middle-income group was most deal prone.</li> <li>• Education was positively and presence of children was negatively related to deal prone</li> <li>• High-priced brands should offer higher savings through coupons than lower-priced brands and products with larger-sized packs should offer greater cents-off value but at a lower saving per unit than that with smaller sizes</li> </ul>	<p>Non- probability: judgment sampling makes sample unrepresentative</p>

**Table 2.5- continued**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
Bawa & Shoemaker (1987)	Coupon	The utility model, based on the economic perspective	Non- probability: judgment sampling In- store consumer panel	Purchases from 462 households Product: ready-to-eat cereal, facial tissue, shampoo, paper towels and cooking oil or shortening	<ul style="list-style-type: none"> <li>From both univariate and regression analyses, coupon-prone households with higher income (only from the univariate analysis), higher husband's education, more likely to live in an urban area, less brand loyal, and less store loyal than non-coupon-prone households.</li> </ul>	Non- probability: judgment sampling makes sample unrepresentative
Lichtenstein & Ridgway (1993)	Sale (not specified) and coupon redemption	Attribution theory, utility theory	Non- probability: convenience sampling Survey method	Shoppers at grocery stores (not specified) (1,000/58.2%) Product: Grocery products	<ul style="list-style-type: none"> <li>Low price search and Sale responsiveness were partly predicted by Coupon proneness, Value consciousness, Price consciousness, and Sale proneness.</li> <li>Price recall was partly predicted by Value consciousness, Price consciousness, Sale proneness, and Price quality scheme.</li> <li>Coupon responsiveness was partly predicted by Coupon proneness, Sale proneness, and Prestige sensitivity</li> </ul>	Non- probability: convenience sampling makes sample unrepresentative
Mittal (1994)	Coupon redemption	Reasoned action theory The model includes factors from demographic, economic, and psychological standpoints, but excludes normative influencing factors	Non- probability: convenience sampling Self administered survey method	Female supermarket shoppers from member of six voluntary organizations and shoppers at shopping plaza (214/76.3%) Product: not specified	<ul style="list-style-type: none"> <li>Demographics affected only Lifestyle and self-perception and Lifestyle and self-perception affected only Consumer traits in the domain of shopping and Consumer traits in the domain of shopping affected only Cost/ benefit perceptions and Cost/ benefit perceptions affected only Coupon attitude and finally Coupon attitude only affected Coupon use.</li> <li>The amount of variance in a dependent construct explained by the proximal independent construct was larger than the amount explained by any other set of distal independent constructs</li> </ul>	Non- probability: convenience sampling makes sample unrepresentative Low reliability for some measurement items might introduce bias

**Table 2.5- continued**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
Lichtenstein, Netemeyer & Burton (1995)	Eight sales promotional techniques: coupons, sales, cents-off labels, buy one get one free, free gift with purchase, end-of-aisle displays, rebates, and contests/ Sweepstake	Not specific	Non- probability: convenience sampling Survey method	Two shopper groups in a mid-western standard metropolitan statistical area First group (1000/58.2%) Second group (896/44.9%) Product: Grocery products and bakery	<ul style="list-style-type: none"> <li>• Deal proneness was a domain specific construct.</li> <li>• Deal proneness as domain specific measures explained variance in deal responsive behaviors beyond that explained by a generalized measure.</li> </ul>	Non- probability: convenience sampling makes sample unrepresentative
Wakefield and Barnes (1996)	The event-oriented sales promotions which added value to offered services	The emotional (hedonic) model based on the utility theory	Probability: simple random sampling Survey method	Attendance at two minor league (AA) baseball games featuring value added sales promotions (i.e., a pennant giveaway and the “Dynamite Lady”)  (575/43.5%) Product: Baseball game	<ul style="list-style-type: none"> <li>• Variety- seeking had a direct positive effect on promotion proneness.</li> <li>• Perceived quality of service, environment had a direct positive effect on perceived value of the service.</li> <li>• Perceived value had a direct negative effect on promotion proneness.</li> <li>• Perceived value had a direct positive effect on re-patronage intentions.</li> <li>• Promotion proneness had a direct negative effect on re-patronage intentions.</li> <li>• Loyalty had a direct negative effect on promotion proneness, and had a direct positive effect on both perceived value and re-patronage intentions.</li> </ul>	Study focused on sports events, not representing the other leisure activities.

**Table 2.5- continued**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
Lichtenstein & Burton (1997)	Eight sales promotional tactics: coupons, sales, cents-off, buy one get one free, free gift with purchase, end of aisle displays, rebates/ refunds, and contests/ sweepstakes	Not specific	Non- probability: convenience sampling Survey method	Shoppers at grocery stores  (1000/58.2%)  Product: not specified	<ul style="list-style-type: none"> <li>• Consumer proneness to eight different types of sales promotion could be categorized into a generalized deal prone or deal insensitive segment.</li> <li>• Significant differences between the consumer segments were obtained across all deal responsive dependent variables.</li> <li>• Deal prone consumers were younger and less educated.</li> </ul>	Non- probability: convenience sampling makes sample unrepresentative
Huff & Alden (1998)	Coupons and sweepstakes	The theory of reasoned action	Non- probability: quota sampling  Data collection method in three countries: Telephone interviews in Taiwan, mall interception interviews in Thailand, and personal interviews in Malaysia	In Taiwan: 200 responses  In Thailand: 250 responses from shoppers at mall.  In Malaysia: 473 responses  Product: not specified	<ul style="list-style-type: none"> <li>• When data from the three countries was aggregated, familiarity, attitudes of friends and family, and price consciousness positively affected and fear of embarrassment negatively affected consumer attitudes to coupons.</li> <li>• Consumer attitudes to coupons and coupon availability positively affected coupon use.</li> <li>• Within country, parts of these influences did not exist. For instance, no effects of familiarity and fear of embarrassment on attitudes were obtained in Taiwan while price consciousness did not affect attitudes to coupons in either Thailand or Malaysia.</li> <li>• When data from all countries were aggregated, familiarity with sweepstake, the attitude of family and friends to sweepstakes, and fun and enjoyment of participating in sweepstakes positively affected consumer attitudes to sweepstakes.</li> </ul>	Selection of subjects may introduce bias  Non probability sampling make samples in each country unrepresentative  Difference in data-collection methods could lead to differences in sample characteristics among these three countries and introduce bias.

**Table 2.5- continued**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
					<ul style="list-style-type: none"> <li>• Attitudes to sweepstakes and sweepstake availability positively affected sweepstake participation.</li> <li>• Within country tests, all influences hold except the effects of familiarity on attitude in Taiwan, fun on attitude in Thailand, and knowing about sweepstake (one measure of availability) on consumer use in Malaysia.</li> </ul>	
Cho and Kang (1998)	Coupon redemption	Utility theory (including both monetary and psychological benefits)	Non- probability: convenience sampling Survey method	Respondents at various public places (e.g., malls, parks, bus stations, airports, etc) were tested with the 25% off coupon The final sample size of respondents: 170 Product: Casual and professional clothing products.	<ul style="list-style-type: none"> <li>• The significant positive relationship between attitudes to a clothing coupon and coupon proneness for both clothing categories.</li> <li>• For casual clothing, the positive relationship of education, the more positive relationship of female than male's, the negative relationships of numbers of children as well as household income, and attitude to the clothing product were found.</li> <li>• For professional clothing, a similar relationship was also found except the existence of the insignificant relationship of education and attitude to the clothing product was found.</li> <li>• Brand loyalty was not significantly related with the attitudes to a clothing coupon.</li> <li>• For coupon promoted professional clothing only, coupon proneness was found to significantly differ among the four consumer groups with varying levels of buying intention (coupon proneness for the respondents in Group 4 was significantly lower than that for respondents in Groups 1,2, and 3).</li> </ul>	Non- probability: convenience sampling and small sample size make sample unrepresentative Findings are specific only to 25% off coupon and causal as well as professional clothing products

**Table 2.5- continued**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Product s studied	Major findings	Major limitations
					<ul style="list-style-type: none"> <li>Brand loyalty was significantly different among the four consumer groups with varying levels of buying intention to both causal and professional clothing categories (consumer’s brand loyalty in Group 1 was found to be significantly lower than that in Groups 2, and 3 for causal clothing. The similar finding for causal clothing plus the lower brand loyalty of Group 1 than Group 4 was also obtained for professional clothing).</li> <li>All demographics did not significantly differ among the four consumer groups of buying intentions.</li> </ul>	
Wakefield and Bush (1998)	The price sales promotion (e.g., discounts based on collecting cereal box tops, 50% discount on ladies night) and non-price organization-relevant sales promotions (e.g., Bat night, Baseball night, Team t-shirt)	The theory of reasoned action; emphasizing psychological factors	Probability: simple random sampling  Survey method	Attendance on the last Saturday baseball games in minor league featuring fireworks show  (500/25.6%)  Product: Baseball game	<p>For price sales promotions</p> <ul style="list-style-type: none"> <li>Price consciousness had a positive effect on attitudes to price sales promotions</li> <li>Gross expenditures had a positive effect and household income had a negative effect on price consciousness</li> <li>Price consciousness had a negative effect on patronage frequency</li> </ul> <p>For non-price organization-relevant sales promotions</p> <ul style="list-style-type: none"> <li>Enduring involvement with the category had a positive effect on identification</li> <li>Identification had a positive effect on patronage frequency</li> <li>Patronage frequency had a positive effect on attitudes to non-price organization-relevant sales promotions.</li> </ul>	<p>Model based on a few factors mainly from the psychological standpoint.</p> <p>Non-response bias due to the low response rate (25.6 percent form 500 surveys distributed)</p> <p>Response bias might exist as this study was conducted the specific game with specific sales promotion that led respondents to answer questions in a certain direction</p>



**Table 2.5- continued**

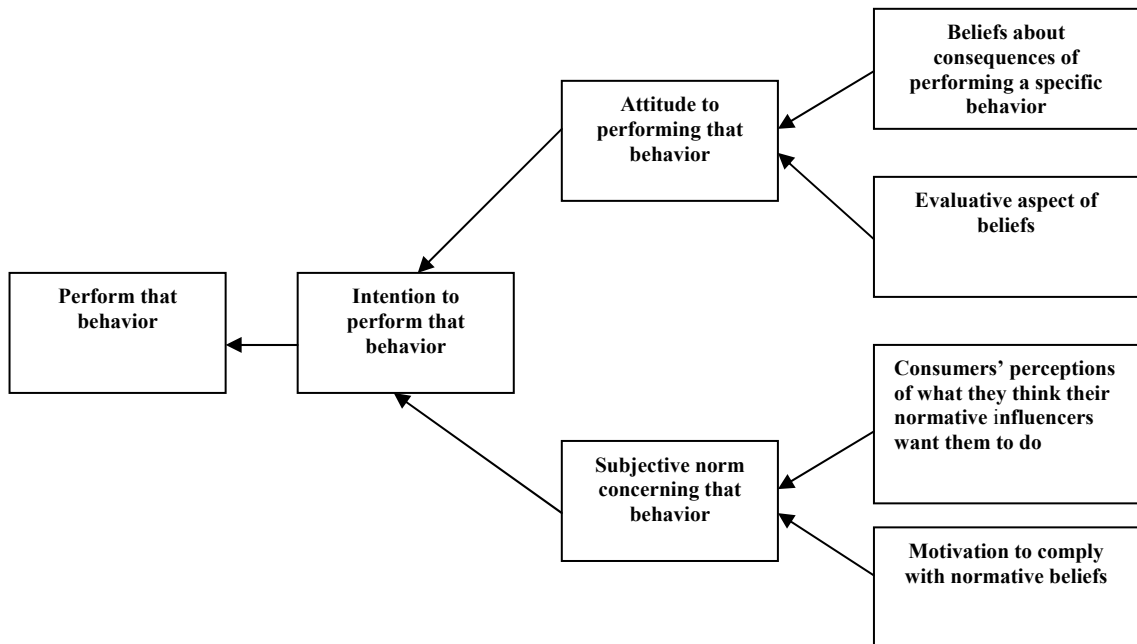
Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
Raghubir & Cofman (1999)	Price discount	Cognitive response theory	Non-probability: convenience sampling: subjects randomly assigned to groups Experimental research	Students from the New York University Products: dentist service, health club, and mutual fund industries	<ul style="list-style-type: none"> <li>Experts were less likely than novices to evaluate a brand unfavorably because it promoted.</li> </ul>	<p>Non- probability makes sample unrepresentative</p> <p>Experimental research makes findings ungeneralizable</p>
Chandon, Wansink & Laurent (2000)	Monetary and non monetary promotions	Utility theory based on both utilitarian and hedonic benefit aspects	Non-probability: convenience sampling Survey	University students Product: not specified	<ul style="list-style-type: none"> <li>The benefits of sales promotions consisted of the utilitarian (quality, savings, convenience) and hedonic (entertainment, value expression, exploration) benefits</li> <li>Non-monetary promotions provided stronger hedonic benefits and weaker utilitarian benefits than monetary promotions and vice versa</li> <li>All benefits except quality contributed to the overall evaluation of monetary and non-monetary promotions but each type of promotion was primarily evaluated on the basis of the dominant benefits it provided</li> <li>Monetary promotions were more effective for utilitarian products than hedonic products and non-monetary promotions were more effective for hedonic products than for utilitarian products.</li> </ul>	<p>Non- probability: convenience sampling makes sample unrepresentative</p> <p>Data might not be projected beyond samples</p>
Ailawadi, Neslin & Gedenk (2001)	In-store (passive) promotions, i.e. display, and out-of-store (active) promotions, i.e. coupon sale flyers	Economic/attitude model including both economic and psychological (hedonic) benefits and relevant costs	Non-probability: convenience sampling Mall intercept consumer survey	Shoppers at four shopping malls in Massachusetts Product: grocery products	<ul style="list-style-type: none"> <li>Demographic factors indirectly affect in-store and out-of-store promotion use through psychographics</li> <li>Relationships between demographics and psychographics:</li> <li>Negative relationships of income and price consciousness, financial constraint</li> <li>Relationships of employment (fulltime), children and time constraint</li> <li>Relationship of living in house and storage space</li> <li>Positive (negative) relationships of age and shopping maven, motivation to conform with others' expectation, storage space, (time pressure)</li> </ul>	<p>Non- probability: convenience sampling makes sample unrepresentative</p> <p>Data might not be projected beyond samples</p>

**Table 2.5- continued**

Author/ Date	Type of sales promotion studied	Theory support/ Model development	Sampling strategy & data collection method	Respondents (Sample size/ response rate) and Products studied	Major findings	Major limitations
					<ul style="list-style-type: none"> <li>• Female shoppers were more innovative, impulsive, shopping maven, store loyal, and planned more for shopping, but had less need for cognition than men</li> <li>• Positive (negative) relationships of education and quality consciousness, innovativeness, need for cognition, storage space, (financial constraint), and (shopping enjoyment)</li> <li>• No relationships found between demographics and two psychographics: variety seeking, and brand loyalty</li> <li>• Consumers using out-of-store promotions had a low need for cognition, brand loyal, shopping maven, less store loyal, enjoyed shopping, had large storage space, and less conformed with others' expectations</li> <li>• Consumers using in-store promotions were financially constrained, impulsive, enjoyed shopping, planned their shopping, and had large storage space</li> </ul>	

Source: developed for this thesis from the studies cited

**Figure 2.2**  
**The Fishbein-Ajzen Attitude Model**



Source: adapted from Fishbein & Ajzen 1975

The theory of reasoned action (Fishbein & Ajzen 1975) provides three key contributions to research in the literature and this thesis. Firstly, it makes an important distinction between a consumer's perceptions or attitudes towards the specific behavior, and that of normative influencers. This aspect is very related to sales promotions since social pressures tend to have an impact on consumer decisions to take advantage of sales promotions (Blattberg & Neslin 1990). This theory suggests that researchers should focus on both the internal consumer factors, such as consumer perceptions, attitudes, and external factors, in specific, subjective norms, when investigating consumer responses to sales promotions.

Secondly, this theory suggests researchers measure perceptions or attitudes towards performing that specific behavior (such as perceptions or attitudes towards a purchase of that product) rather than measuring overall perceptions or attitudes toward a product around the purchasing behavior (Ha 1998; Lutz 1991). This is because a consumer's overall perceptions toward a stimulus may not often be a good predictor of his/her specific behaviors regarding that stimulus (Fishbein 1980).

And thirdly, the theory of reasoned action (Fishbein & Ajzen 1975) introduces behavioral intention as the key construct that mediates the influence of consumers' attitudes and perceptions on actual behaviors. Actual behaviors, such as actual product purchases, are a key response variable that marketers need to emphasize when investigating consumer responses to sales promotions (Kotler 2000; Pelsmacker et al. 2001; Percy 1997; Schultz et al. 1998). However, findings of research measuring the effect of consumers' attitudes and perceptions on actual behaviors may be distorted due to other situational factors that researchers tend not to investigate (Blattberg & Neslin 1990; Hoyer & MacInnis 1997). For example, consumers may evaluate buying a discounted brand favorably, but may not engage in the behavior of buying it due to product unavailability, or due to the perceived low quality of products (Mowen & Minor 1997). This may result in low internal validity and biased results of the research (Zikmund 1997).

In order to improve this model's ability to predict consumer responses to a stimulus, the theory of reasoned action suggests researchers need to focus on 'how' consumers' perceptions and attitudes translate into behavioral intentions rather than on actual behaviors (Hoyer & MacInnis 1997). Behavioral intention is the single best predictor of actual behavior (Peter & Olson 2002) and trying to predict behavioral intention is much easier than trying to predict actual behaviors (Ajzen & Fishbein 1980; Hoyer & MacInnis 1997; Sheppard, Hartwick & Warshaw 1988). Therefore, behavioral intention will be employed as the key response variable in this thesis.

The theory of reasoned action (Fishbein & Ajzen 1975) has been applied extensively as the basis for product or advertising decisions because these actions have a direct influence on consumer perceptions (Blattberg & Neslin 1990). However, application of this theory to the sales promotion context is still in its introductory stage (Bawa & Shoemaker 1987; Blattberg & Neslin 1990). Early studies (for instance Blattberg et al. 1978; McCann 1974; Narasimhan 1984a) were more likely to apply utility theory rather than the theory of reasoned action, to develop their research models. As a result, factors included in these studies were confined only to the internal consumer characteristics, in particular demographic and psychographic variables that related to perceived utility, whereas normative influencing factors were disregarded.

Recent studies undertaken in this area have increasingly adopted the theory of reasoned action (Fishbein & Ajzen 1975) in their research. For example, the concept that explains how consumers' perceptions influence their specific behaviors through their attitudes to those behaviors was applied in a study by Mittal (1994) to justify the effects of demographic and psychographic variables relating to perceived utility on consumer attitudes to coupon redemptions and coupon redemption behaviors, found in this study (Mittal 1994). However, this study did not investigate normative influencing factors and did not include behavioral intention as a key response variable. Instead this study suggested future research to explore these limitations.

More recent studies (in particular Ailawadi et al. 2001; Huff & Alden 1998) attempting to fill these gaps took normative influencing factors into account. In the study by Huff and Alden (1998), along with psychographic factors (such as price consciousness, familiarity, enjoyment of participating in sales promotions), attitudes of friends and family towards coupons and sweepstakes was found to be influential in explaining consumers' attitudes towards the promotion investigated and the consumers' uses of coupons and sweepstakes (Huff & Alden 1998). However, they excluded motivation to conform to subjective norms from their study without any justification.

On the other hand, the study by Ailawadi et al. (2001) explored a more complete set of demographic and psychographic characteristics relating to utility theory. Along with these consumer characteristics, they also focused on a particular normative influencing factor, namely the motivation to conform to the expectations of reference groups. This normative influencing factor was found to be negatively related to consumers' out-of-store sales promotions. However, a justification of the exclusion of the other normative influencing factor, such as attitudes of reference groups towards the investigated sales promotions, was not given.

In brief, this section provided a discussion about the main theories to be used in this thesis, namely: utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975). More recent studies (in particular Ailawadi et al. 2001; Huff & Alden 1998; Mittal 1994) were likely to provide a more complete view of consumer responses to sales promotions by incorporating both the theory of reasoned action (Fishbein & Ajzen 1975) and utility theory (Thaler 1985) in developing their research models. These

theories and findings of research previously reviewed will assist the researcher in explaining the influences of consumer characteristics on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in Thailand. Next, the literature turns to the review of key findings of empirical research into consumer characteristics and their influences on consumer responses to sales promotions.

### **2.3 Consumer characteristics and their influences on consumer responses towards sales promotions**

The previous section discussed two key consumer behavior theories relating to consumer characteristics that influence consumer responses to sales promotions, namely: utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975). This section will be organized into two parts. Firstly, the literature about factors potentially influencing consumer behavior is overviewed, then, the review will provide insights into research findings identifying consumer characteristics and their influences on consumer responses to products promoted through sales promotions in section 2.3.1 and 2.3.2.

There are a number of factors that can influence consumer behavior (Mowen & Minor 1998). Those factors have been theoretically identified by many authors (for example, Anderson & Kleiner 1995; Hawkins, Best & Coney 1998; Hoyer & MacInnis 1997; Mowen & Minor 1998; Williams 1992; Samli 1995; Schiffman & Kanuk 1997), and are summarized in Table 2.6. Essentially, these factors can be grouped into individual differences, environmental influences, and a consumer's psychological process and they include, for instance, perception, learning, memory, attitudes (Hawkins, Best & Coney 1998; Hoyer & MacInnis 1997), past experience, beliefs, and expectations (Williams 1992; Samli 1995).

The individual difference factors contain major consumer characteristics such as demographics, psychographics, perception, and attitudes as sub-constructs. These sub-constructs could be further divided, for instance, by gender, age, education, activities, interests, and opinions. The environmental influence factors are another major grouping that contains various essential factors, such as reference groups, and competitors' promotional programs.

**Table 2.6- Factors influencing a consumer’s decision process**

Factors	Authors							Total
	Anderson & Kleiner 1995	Hawkins, Best & Coney 1998	Hoyer & MacInnis 1997	Mowen & Minor 1998	Williams 1992	Samli 1995	Schiffman & Kanuk 1997	
<b>Individual difference factors:</b>								
Demographics	•	•	•	•		•		5
Social/economic class	•	•	•	•	•	•		6
Geographics				•				1
Personality and psychographics	•	•	•	•	•	•	•	7
Motives	•	•	•	•	•		•	6
Emotion		•	•	•	•			4
Perception	•	•	•	•	•	•	•	7
Learning and comprehension	•	•	•	•	•		•	6
Memory		•	•	•	•	•		5
Attitude	•	•	•	•	•	•	•	7
Past experience and belief					•	•		2
Future expectation					•	•		2
<b>Environmental influence factors:</b>								
Reference groups and family	•	•	•	•	•	•	•	7
Cultural/ sub-cultural factors		•		•	•	•	•	5
Economic factors				•	•	•	•	4
Regulatory factors				•		•	•	3
Situational factors		•		•	•	•	•	5
Regional factors			•			•	•	3
Ethnic factors	•		•			•	•	4
Religion			•			•	•	3
Technology						•		1

Source: developed for this thesis from the authors cited.

A number of empirical studies have emerged exploring these factors and investigating their influences on consumer responses to sales promotions. Findings of these studies are illustrated in Table 2.5. In general, factors found to be influential can be grouped into demographics, and psychographics and other factors. These factors and their influences are now reviewed in the following sections.

### 2.3.1 Demographics

Demographics are factors describing a population in terms of its size (the number of people in a society), structure (age, income, education, and occupation), and distribution (the physical location of people in terms of geographic region and rural, suburban and urban location) (Hawkin, Best & Coney 1998). Demographics commonly investigated in

previous empirical studies include income, employment status, family (household) size or presence of children, age, gender, and education. Direct influences of these factors on consumer responses to products promoted through sales promotions have been the focus of early studies. For example, income and family size were examined to determine how they related to a change in promotional activities by McCann (1974). Gender, employment, income, presence of children, car and home ownership were explored in relation to their impact on consumers' deal proneness by Blattberg et al. (1978). The influences of income, education, and physical location on coupon use were studied by Narasimhan (1984a).

Although these early studies attempted to identify demographic characteristics as influential in explaining consumer responses to sales promotions, their findings signaled to more recent studies that studies emphasizing demographic characteristics could not achieve consistent research results indicating these demographic factors as the key influential factors. Demographic factors found to be influential in some of these early studies were not found to be influential in others.

For example, the relationship between a wife's education and her coupon proneness was found in one study (Narasimhan 1984a) but not in the other (Bawa & Shoemaker 1987). Age was not related to consumer responses to coupon redemption in some studies (Bawa & Shoemaker 1987; Narasimhan 1984a) but was later found to influence coupon use behavior in more recent studies by Ailawadi et al. (2001) and Lichtenstein and Burton (1997). Employment was found to be an influential factor in a study by Mittal (1994) but not in studies by Bawa & Shoemaker (1987) and Narasimhan (1984a). With this disparity, early studies could not provide a robust explanation supporting that these demographic factors were influential in explaining consumer responses to sales promotions (Ailawadi et al. 2001; Blattberg & Neslin 1990; Mittal 1994).

Therefore, more recent studies have shifted their investigations to other potential factors, in particular psychographic characteristics (Ailawadi et al. 2001; Mittal 1994), and normative influencing factors (Ailawadi et al. 2001; Huff & Alden 1998). These factors have been found to play a more important role in explaining consumer responses to sales promotions (Ailawadi et al. 2001; Huff & Alden 1998; Mittal 1994) than the



demographics. The discussion now turns to the psychographic and normative influencing factors.

### **2.3.2 Psychographics and normative influencing factors**

As early studies have signaled that demographics might not be the only key influential factor on consumer responses to sales promotions, more recent studies (such as Ailawadi et al. 2001; Mittal 1994) have focused more on a range of other psychographic and normative influencing factors than on the demographics.

Psychographics refer to a measurement of the external characteristics of consumers indicating their lifestyle or how a consumer lives, which can be ascertained through an analysis of consumer's activities, interests, and opinions (Mowen & Minor 1998). Personality, on the other hand, refers to the internal characteristics of a consumer, describing a consumer's characteristic pattern of thinking, feeling, and perceiving (Markin 1974; Mowen & Minor 1998). As psychographics and personality are closely related (Mowen & Minor 1998), factors in relation to these two constructs will be discussed under the name of psychographic factors in this research.

In addition, normative influencing factors are environmental factors to the individual and affect individual consumers' decision-making processes (Hawkins et al. 1998; Mowen & Minor 1998). Based on the theory of reasoned action (Fishbein & Ajzen 1975), included as key normative influencing factors are motivation to conform to the expectations of reference groups and attitudes of reference groups towards sales promotions.

As previously summarized in Table 2.5, a number of empirical studies have emerged exploring psychographic factors that have been shown to influence consumer responses to sales promotions. In general, these studies have provided two key contributions to this research. Firstly, they have identified a number of possible psychographic and normative influencing factors that will be considered for the inclusion in this research, and secondly, some of these studies (Ailawadi et al. 2001; Huff & Alden 1998; Mittal 1994) not only identified key influential consumer psychographic characteristics and normative influencing factors, but also justified how these factors impacted consumer responses to sales promotions. Key findings of these studies are now reviewed.

There have been a number of studies attempting to identify psychographic characteristics that influence consumer responses to sales promotions. For instance, the research into the context of grocery products promoted through coupon redemption, has found a positive relationship between coupon proneness, sale proneness, value consciousness and coupon redemption behaviors, and a negative relationship between prestige sensitivity, price mavenism and coupon redemption behaviors (Lichtenstein & Ridgway 1993). A similar study found that coupon prone households were less brand and store loyal when compared to those who were non-coupon prone (Bawa & Shoemaker 1987). The research in this area with other product categories, such as clothing, has found significant positive relationships between coupon proneness, but not brand loyalty, and attitudes to a clothing coupon existing in both casual and professional clothing categories (Cho & Kang 1998).

Similar studies on the service contexts have also emerged investigating factors that influence consumers' re-patronage intentions to baseball games featuring value added sales promotions (a pennant giveaway and the "Dynamite Lady" event) (Wakefield & Barnes 1996). It was found that variety seeking had a direct and positive influence on consumers' promotion proneness, and brand loyalty and perceived value had a direct and negative influence on this consumer response variable (Wakefield & Barnes 1996). In addition, perceived value had a direct and positive effect on consumers' re-patronage intentions, but promotion proneness and brand loyalty had a direct and negative impact on this response variable. Perceived value of the service was directly and positively affected by perceived quality of service environment and brand loyalty (Wakefield & Barnes 1996).

In addition to psychographic factors, normative influencing factors in relation to reference groups have also been shown to be significant in explaining consumer responses to sales promotions (Huff & Alden 1998). In addition, the theory of reasoned action (Fishbein & Ajzen 1975) confirms the appropriateness of the inclusion of the attitudes of reference groups in research attempting to understand consumer responses to sales promotions. They found that, along with other psychographic factors, namely: consumers' familiarity with coupon use; price consciousness; and fear of embarrassment, the attitudes of friends and family to coupon use positively affected

consumer attitudes to coupons. In turn, consumer attitudes to coupon and coupon availability, positively affected coupon use (Huff & Alden 1998).

Similar research was also conducted in relation to sweepstakes supporting the attitudes of reference groups towards sweepstakes as being significant along with other psychographic characteristics. That is, familiarity with sweepstakes, the attitudes of family and friends to sweepstakes, and fun and enjoyment of participating in sweepstakes, were found to be the key factors that positively influenced consumer attitudes to sweepstakes. In turn, attitudes to sweepstakes and sweepstake availability, positively affected sweepstake participation (Huff & Alden 1998). Based on these findings (Huff & Alden 1998), attitudes of reference groups towards sales promotions is a key factor that will be taken into account in this study investigating this research area.

Although previous studies were able to identify a finite number of influential psychographic factors, it appears that none of these studies attempted to investigate all of these relevant factors at one time. More recent studies (Ailawadi et al. 2001, Mittal 1994) have attempted to fill this gap by simultaneously including a number of psychographic factors in their research models. More importantly, they also aimed to develop a more accurate understanding of how consumer characteristics impact consumer response variables by additionally investigating intervening mechanisms of demographic and psychographic factors.

Two studies, one by Ailawadi et al. (2001) and the other by Mittal (1994), have not only suggested a set of key possible demographic, and psychographic variables that should be investigated in this study, but also provided a valuable explanation regarding the hierarchical effect of demographic and psychographic characteristics on consumer responses to sales promotions. They both found that demographics were less important than psychographic characteristics, and were likely to influence the consumer response variables only through psychographic variables. These psychographic variables in turn, were found to directly impact consumer responses to the investigated sales promotions (Ailawadi et al. 2001; Mittal 1994). These hierarchical relationships between consumer characteristics and the consumer response variables found in these two studies, will be used as the basis for developing preliminary hypotheses justifying the relationships

between demographic, psychographic, and purchase intention variables in section 2.4.3. Research findings of these two studies are now summarized.

In the study by Mittal (1994), demographic, life style, and psychographic factors measuring cost/benefit perceptions were explored to identify key factors that influenced consumer attitudes and coupon use behavior. Findings of this study suggested demographics were the most distal factors that influenced consumer attitudes and coupon use. The results indicated that demographics only affected lifestyle and self-perception, which in turn influenced purchase patterns. Purchase patterns in turn impacted psychographic characteristics relating to the cost/benefit perceptions, which had an effect only on consumer attitudes. Lastly, consumer attitudes then affected coupon use behavior. In addition to this, the amount of variance in a dependent construct explained by the proximal independent construct was found to be larger than the amount explained by any other set of distal independent constructs (Mittal 1994).

More recently, the knowledge gained from research investigating a larger set of demographic and psychographic factors related to perceived utility has been extended (Ailawadi et al. 2001). In addition, the theory of reasoned action (Fishbein & Ajzen 1975) has been incorporated. Demographic and psychographic factors, and motivation to conform to the expectations of reference groups were investigated as to whether these factors had a significant impact on the three consumer response variables, namely: consumers' store brand usage; consumers' use of grocery products promoted through in-store (such as display, in store price-off coupon), and; out-of-store sales promotions (such as out-of store coupons) (Ailawadi et al. 2001).

Demographic and psychographic factors have been found to effectively explain variances in consumer responses to promoted products (Ailawadi et al. 2001). Findings of this study also supported Mittal (1994)'s suggestions that demographics did not affect consumer purchases of promoted products directly, but indirectly through psychographic characteristics. In addition, consumers could be segmented into four groups: deal-focused consumers, store brand-focused consumers, deal and store brand users (use-all), and nonusers of both store brands and deals (use-none). And impulsiveness, shopping enjoyment, shopping plan, storage availability, motivation to conform to reference groups' expectations, brand loyalty, store loyalty, and need for cognition were found to

be the key psychographic characteristics of deal-focused consumers (Ailawadi et al. 2001).

These researchers have strongly supported the inclusion of a factor regarding motivation to conform to the expectations of reference groups in the research model along with other demographic and psychographic characteristics, because these normative influencing factors could significantly improve the explanatory power of additional variance in consumer responses to sales promotions (Ailawadi et al. 2001).

In summary, this section provided a theoretical understanding of how consumer demographic, psychographic, and normative influencing factors have been shown to impact consumer responses to products promoted through sales promotions. Utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) are the key relevant theories. Findings of empirical studies have suggested that there are a number of demographic and psychographic characteristics, and normative influencing factors that have an impact on consumer responses to sales promotions. In particular, studies by Ailawadi et al. (2001) and Mittal (1994) have provided valuable explanations of intervening relationships between the demographic and psychographic characteristics, and the influence these factors have on consumer responses to product promoted through sales promotions. This knowledge will be employed as a framework for preliminary hypotheses to be developed in section 2.4.3. The discussion now moves to the preliminary hypotheses.

#### **2.4 Preliminary hypotheses of consumer characteristics and their influences on consumer intentions to purchase the seasonally discounted Reebok athletic footwear**

The literature has discussed two key consumer behavior theories relevant to factors influencing consumer responses to products promoted through sales promotions, namely: utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975). Research in this area has adapted these theories and suggested a number of possible antecedent consumer characteristics that could influence these responses. These characteristics include demographic and psychographic characteristics that relate to perceived utility, and normative influencing factors, specifically motivation to conform to the expectations of reference groups and attitudes of reference groups towards sales

promotions. Specifically, demographic characteristics were found to be less important in explaining these responses, compared to other psychographic and normative influencing factors (Ailawadi et al. 2001; Mittal 1994). However, to this end, none of the previous research has simultaneously included all of these relevant factors in their studies investigating consumer reactions to sales promotions. This research aims to fill these theoretical gaps by incorporating into one study all of these key consumer characteristics and identifying if they are influential factors. Also, this research will examine the relative importance of these factors when they are incorporated together to explain the variance of the purchase intention variable.

In addition, two recent studies, one by Ailawadi et al. (2001) and the other by Mittal (1994), have shed light on the intervening mechanisms of consumer characteristics (demographics, psychographics, and normative influencing factors), explaining how these characteristics differently affected consumer responses to sales promotions. They suggested demographics as indirect factors that could affect consumer responses to sales promotions only through the relevant psychographic characteristics (Ailawadi et al. 2001; Mittal 1994). To further explore this intervening mechanism issue, this research also attempts to investigate the pattern of relationships and interrelationships with these variables in terms of their impact on the purchase intention variable.

In this section, preliminary hypotheses proposing relationships between these factors and consumer intentions to purchase the seasonally discounted Reebok athletic footwear will be developed. The discussion commences with the justifications of the adoption of purchase intention as the key response variable in this research (section 2.4.1). Key consumer characteristics included in the preliminary hypotheses are identified in section 2.4.2. Then preliminary hypotheses in relation to the relationships between the selected consumer characteristics and the purchase intention variable are proposed in section 2.4.3.

#### **2.4.1 Key response variable: purchase intentions**

There are a number of consumer response variables investigated in the literature in relation to the influence of consumer characteristics. However, the most commonly investigated response variables in research relating to sales promotions have been either actual purchase behavior of products promoted through sales promotions (Narasimhan

1984a; Bawa & Shoemaker 1987a; Lichtenstein & Ridgway 1993; Mittal 1994; Lichtenstein et al. 1995; Huff & Alden 1998; Ailawadi et al. 2001), consumer attitude towards sales promotions (Mittal 1994; Huff & Alden 1998; Cho & Kang 1998; Wakefield & Bush 1998) and/or purchase intention of promoted products (Wakefield & Barnes 1996; Cho & Kang 1998). The theory of reasoned action justifies these three variables as the key consumer responses that could be influenced by consumer characteristics in relation to consumer perceptions and evaluations, and normative influencing factors (Fishbein & Ajzen 1975). These response variables are now discussed.

**Consumers' actual purchase** is the key consumer response that marketers aim to motivate when implementing sales promotional campaigns (Kotler 2000; Pelsmacker et al. 2001; Percy 1997; Schultz et al. 1998). However, studies examining consumers' actual purchase responses towards products promoted through sales promotions might yield biased results due to the effect of situational factors not included in these studies (Hoyer & McInnis 1997), as discussed in section 2.2.2. Therefore, actual purchase behaviors will not be investigated in this study.

In relation to **consumer attitudes towards sales promotions**, attitudes induce people to respond in a favorable or unfavorable manner with respect to a stimulus (Fishbein & Aizen 1975). Consumer attitudes consist of three key components, namely: cognitive (beliefs or perceptions); affective (feelings); and behavioral (response tendencies) (Hawkins et al. 1998). Empirical studies have emerged investigating the influence of consumer characteristics on consumer attitudes towards products promoted through sales promotions (such as Cho & Kang 1998; Huff & Alden 1998; and Mittal 1994). However, these studies have been limited to studying the affective component of attitudes or a consumer's feelings about the investigated promoted products. They found this attitude component to mediate the effect of consumer characteristics on the behavioral variables investigated.

It appears that the focus of these studies was still on identifying consumer characteristics and examining the influence of these characteristics on the behavioral response variables, such as the actual purchase of promoted products (Huff & Alden 1998; Mittal 1994) or the purchase intention (Cho & Kang 1998), rather than on the consumer's

feelings to products promoted through sales promotions. These findings raise the question of whether or not this attitude may be excluded from this study.

The findings of a more recent study (Ailawadi et al. 2001) have provided the answer to the above question. These researchers signal that dropping attitudes from their research did not reduce the effectiveness of their research model developed to explain how consumers respond to sales promotions. These researchers were able to provide a more complete research model including a number of consumer demographic, psychographic, and normative influencing factors that could be used to depict consumer responses to sales promotions, without considering the impact specifically of attitudes to sales promotions.

Based on the above justifications, the exclusion of the attitudes was deemed unlikely to adversely impact ability of their research to explain this sales promotion phenomenon. Furthermore, attitudes appear to add little additional value to an understanding of the context to be studied. Therefore, attitudes to sales promotions are excluded from this research.

The appropriateness of the adoption of **purchase intentions** as the key response variable has been justified in section 2.2.2. Key reasons for the use of purchase intentions as the single key response variable can be summarized as follows:

- Purchase intention tends to be the single best predictor of actual behavior (Peter & Olson 2002);
- Trying to predict purchase intention is easier than trying to predict actual behaviors (Ajzen & Fishbein 1980; Hoyer & MacInnis 1997; Sheppard et al. 1988); and
- Research examining the effect of consumers' characteristics on behavioral purchase intentions is less likely to face biased research results due to other situational factors that researchers do not investigate, compared to that examining the effect of consumers' characteristics on actual behaviors (Blattberg & Neslin 1990; Hoyer & MacInnis 1997; Lichtenstein et al. 1990).

In brief, **behavioral intention**, specifically **consumer intentions to purchase the seasonally discounted Reebok athletic footwear**, is adopted as the single key response



variable for this research. The discussion now turns to key consumer characteristics included in the preliminary hypotheses.

#### **2.4.2 Key consumer characteristics included in the preliminary hypotheses**

The literature has identified a number of demographic and psychographic characteristics, and normative influencing factors that have been shown to be influential in explaining consumer responses to sales promotions. Table 2.7 summarizes these factors, and indicates the degree to which these factors have been consistently found to be key influencing factors in the literature. The first column of this table highlights influential antecedent factors identified in the literature. The next fourteen columns illustrate which studies identified these factors as being influential in consumer responses to products promoted through sales promotions. The sixteenth column addresses the degree to which each factor is consistently supported as influential across these research studies (strong, medium, weak, or none).

In order to develop a comprehensive and parsimonious research model, this study will include only key and relevant factors expected to significantly explain the variance in consumer intentions to purchase the seasonally discounted Reebok athletic footwear. On the other hand, factors that are unlikely to be related to, or add little additional value to, an understanding of the context to be studied should be eliminated (Serakan 2000; Whetten 1989). Factors to be eliminated are store loyalty, location of residence, and identification. The exclusion of these factors is now briefly justified.

**Store loyalty** has been suggested to be an influential factor by some studies (Ailawadi et al. 2001; and Mittal 1994). However, this variable was found to have a relationship with store switching behaviors only, not the brand switching behaviors. In addition, store loyalty and store switching behaviors are likely to be related to retail promotions (Ailawadi et al. 2001; Blattberg & Neslin 1990; Sirohi, McLaughlin & Wittink 1998), rather than brand promotions (Blattberg & Neslin 1990). Similarly, **location of residence** was investigated and found to be related to store coupon redemptions (Bawa & Shoemaker 1987), not the product or brand promotions. As the focus of this study is on the sales promotion of an athletic footwear brand, and as store loyalty and location of residence have not been shown to be relevant to this context, these factors will not be included in this research.

**Table2.7- Factors found to be influential in explaining consumer responses to sales promotions**

Empirical studies*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	The degree to which this factors is consistently suggested as influential across studies (S,M,W,N)**
<b>Antecedent factors</b>															
<b>Demographics</b>															
Age									•					•	M
Gender		•				•					•			•	S
Income	•	•	•	•		•					•	•			S
Employment						•									W
Family (household) size	•					•									M
Presence of children		•	•								•				S
Education			•	•		•			•		•			•	S
Type of residence														•	W
Location of residence				•											W
<b>Psychographics</b>															
Price consciousness	•				•					•		•			S
Value consciousness					•										W
Quality consciousness					•										W
Market mavenism													•	•	M
Brand loyalty				•		•		•				•		•	S
Store loyalty						•								•	M
Identification												•			W
Variety seeking	•							•							M
Time pressure						•									W
Shopping plan														•	W
Shopping enjoyment														•	W
Impulsiveness														•	W
Need for cognition														•	W
Deal proneness	•				•		•	•							S
Perceived inventory space														•	W
<b>Reference groups</b>															
Motivation to conform to the expectations of reference groups														•	W
Attitudes of reference groups towards discounted products										•					W
<b>Key response variables</b>															
Consumer attitudes						•				•	•	•			S
Actual purchase behaviors			•		•	•	•			•				•	S
Purchase intentions								•			•				M

\*Empirical studies:

1. McCann (1974), 2. Blattberg et al (1978), 3. Narasimhan (1984a), 4. Bawa & Shoemaker (1987a), 5. Lichtenstein & Ridgway (1993), 6. Mittal (1994), 7. Lichtenstein, Netemeyer & Burton (1995), 8. Wakefield & Barnes (1996), 9. Lichtenstein & Burton (1997), 10. Huff & Alden (1998), 11. Cho & Kang (1998), 12. Wakefield & Bush (1998), 13. Raghurir & Cofman (1999), and 14. Ailawadi, Neslin & Gegenk (2001)

\*\* S= strong (when that variable is consistently suggested as influential by at least three empirical studies)

M= moderate (when that variable is consistently suggested as influential by two empirical studies)

W= weak (when that variable is consistently suggested as influential by an empirical study)

N= none (when that variable is not suggested as influential by any studies)

Source: developed for this thesis

Another factor eliminated from this research is that of **identification**. Identification has been found to be influential in explaining consumer responses to baseball games promoted through price promotions, and in relation to event marketing (Wakefield & Bush 1998). These researchers defined identification as, ‘the degree to which consumers respond to events that occur to an organization or individuals within an organization as if the events have happened to them’ (Wakefield & Bush 1998, p. 212). Based on this interpretation, this factor is shown to be more related to the service context than the context of athletic footwear, and is therefore, eliminated from this research.

The most problematic issue in the independent variable selection is that of specification error (Hair et al. 1998). This problem exists from the inclusion of non-relevant independent variables or the exclusion of relevant independent variables. The inclusion of non-relevant independent variables can reduce model parsimony or hide the effect of more important variables. On the other hand, the exclusion of relevant variables can seriously reduce the overall predictive accuracy of the analysis (Hair et al. 1998). As elimination of antecedent factors to this point has been based on a review of literature only, the relevance of all factors will be tested in the exploratory stage (chapter 3) to confirm that specification error will not be a serious issue for this research.

In brief, antecedent factors to be included in the preliminary hypotheses are those primarily determined to be related to the athletic footwear context. They include eight ***demographic characteristics*** (age, gender, income, employment, family size, presence of children, education, and type of residence); thirteen ***psychographic characteristics*** (price consciousness, value consciousness, quality consciousness, market (price) mavenism, brand loyalty, variety seeking, time pressure, impulsiveness, need for cognition, deal proneness, perceived inventory space, shopping plan, and shopping enjoyment); and two ***normative influencing factors*** (motivation to conform to the expectations of reference groups, and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear). Now the discussion turns to preliminary hypotheses.

### **2.4.3 Preliminary hypotheses**

In this section, utility theory (Thaler 1985), the theory of reasoned action (Fishbein & Ajzen 1975), and the literature in relation to consumer characteristics and their influence on consumer responses to sales promotion, are combined to develop the following preliminary hypotheses. In general, the demographic characteristics of consumers are hypothesized to vary in term of their impact on a range of psychographic characteristics and/or normative influencing factors. In turn, these psychographic characteristics and normative influencing factors are expected to influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

The discussion commences with the hypotheses in relation to the influence of demographic factors on psychographic and normative influencing variables. Next, the hypotheses regarding the impact of psychographic and normative influencing variables on the variable of consumer intentions to purchase the seasonally discounted Reebok athletic footwear are justified. The discussion then turns to the section discussing the effect of all relevant antecedent consumer characteristics on the purchase intention variable. All preliminary hypothesis statements are summarized in Table 2.8.

#### ***The influence of demographic factors on psychographic or normative influencing factors.***

There have been a number of studies investigating various consumer characteristics and their influence on consumer responses to sales promotions, as previously summarized in Table 2.5. To gain a more accurate understanding of the influence consumer characteristics have on consumer responses to sales promotions; researchers should also delineate the intervening mechanisms between the influential factors in addition to identifying influential factors (Mittal 1994). However, it appears that most of the previous studies have focused their research on the influence of these characteristics on the consumer response variables, not the relationships between these characteristics. Few studies (such as Ailawadi et al. 2001; Mittal 1994) have researched the relationships between these antecedent consumer characteristics in addition to the relationships between these factors and the response variables, and have found a number of significant relationships, which were previously shown in Table 2.5.

**Table 2.8-Summary of preliminary hypothesis statements**

Hypothesis	Antecedent variables	Response variable	Expected relationships
H1	Income	Price consciousness	Income will negatively influence price consciousness.
H2	Gender	Deal proneness	Female consumers are more likely than male consumers to be deal prone.
H3	Education	Need for cognition	Education will positively influence need for cognition.
H4	Education	Variety seeking	Education will positively influence variety seeking.
H5	Education	Quality consciousness	Education will positively influence quality consciousness.
H6	Age	Market (price) mavenism	Age will positively influence market (price) mavenism.
H7	A: Employment status B: Age	Motivation to conform to expectations of reference groups	A: There is a difference in the level of motivation to conform to expectations of reference groups across employment status, and B: Age will negatively influence motivation to conform to the expectations of reference groups.
H8	A: Age B: Education	Time pressure	A: Age will negatively influence time pressure, and B: Education will positively influence time pressure.
H9	Gender	Impulsiveness	Female consumers are more likely than male consumers to be impulsive.
H10	A: Type of residence B: Education	Perceived storage space	A: There is a difference in the level of perceived storage space constraints across type of residence (living in a house or an apartment, or townhouse), and B: Education will positively influence perceived storage space constraints.
H11	Gender	Shopping plan	Female consumers are more likely than male consumers to plan their shopping.
H12	Education	Shopping enjoyment	Education will positively influence shopping enjoyment.
H13	A: Price consciousness B: Deal proneness C: Need for cognition D: Market (price) mavenism E: Impulsiveness F: Time pressure G: Quality consciousness H: Value consciousness I: Loyalty to other athletic footwear brands J: Variety seeking K: Perceived inventory space L: Shopping plan M: Shopping enjoyment N: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear, and	Purchase intentions	A: Price consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, B: Deal proneness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, C: Need for cognition will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, D: Market (price) mavenism will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, E: Impulsiveness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, F: Time pressure will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,

**Table 2.8- continued**

Hypothesis	Antecedent variables	Response variable	Expected relationships
	O: Motivation to conform to the expectations of reference groups.		<p>G: Quality consciousness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>H: Value consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>I: Loyalty to other athletic footwear brands will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>J: Variety seeking will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>K: Perceived inventory space will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>L: Shopping plan will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>M: Shopping enjoyment will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>N: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will positively influence consumers' purchase intentions.</p> <p>O: Motivation to conform to the expectations of reference groups will negatively influence consumers' purchase intentions.</p>
H14	All 8 demographic, 13 psychographic, and 2 normative influencing factors	Purchase intentions	There will be no relationship between all of these antecedent consumer characteristic factors and the purchase intention variable.

Source: Developed for this thesis

This research attempts to investigate not only the relationship between antecedent consumer characteristic and the purchase intention variables, but also the relationships between all of these antecedent consumer characteristics. At this stage, preliminary hypotheses in relation to the relationships between consumer characteristics, particularly demographic, psychographic, and normative influencing factors, are developed based on limited findings of empirical research, which have emerged in this literature. Some of these consumer characteristics may not have been previously found to have a relationship with others in the literature and will therefore be explored in the exploratory research, which will be discussed in chapter 3. These characteristics include family size,

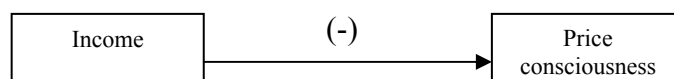
presence of children, value consciousness, and brand loyalty (specifically loyalty to other athletic footwear brands).

Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear is not hypothesized to have a relationship with any of the consumer internal demographic characteristics since this factor is external to consumers (Fishbein & Ajzen 1975), therefore, it is unlikely to relate with the internal consumer demographic characteristics. However, attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will be expected to have a direct relationship with purchase intentions. This relationship will be further discussed in the next section. Now the discussion turns to the first preliminary hypothesis justifying the relationship between income and price consciousness.

**Hypothesis 1: Income will negatively influence price consciousness.**

Income is one of the most important demographic variables being considered as influential to consumer responses to sales promotions. Compared to those who have higher income, lower income consumers were less likely to perceive themselves to be financially well off (Mittal 1994), and were more likely to be financially constrained (Ailawadi et al. 2001). Due to this perception, they are more likely to become price conscious and will search extensively for promotional information through a variety of media. They are likely to have price knowledge, recognize the price advantage of the discounted brand (Lichtenstein & Ridgway 1993), and focus on the amount of money they could save from a purchase (Ailawadi et al. 2001; Lichtenstein & Ridgway 1993; and Mittal 1994). Thus, as illustrated in Figure 2.3, the researcher expects income to have a negative relationship with price consciousness.

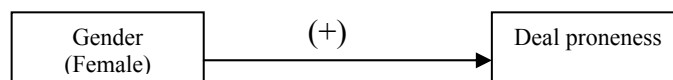
**Figure 2.3- The influence of income on price consciousness**



**Hypothesis 2: Female consumers are more likely than male to be deal prone.**

Little research has been undertaken to clarify deal prone consumers. An earlier study investigating deal prone consumers suggested that female consumers might be more likely than males to evaluate their purchase based on promotions received, and became deal prone consumers (Blattberg et al. 1978). As shown in Figure 2.4, we expect female consumers to be more deal prone, compared to male consumers.

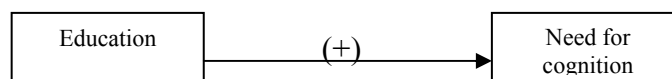
**Figure 2.4- The influence of gender on deal proneness**



**Hypothesis 3: Education will positively influence need for cognition.**

The relationship between education and need for cognition has been found in previous studies (Ailawadi et al. 2001). Higher educated consumers were found to have a higher need for cognition, and to be associated with more extensive information processing. On the other hand, lower educated consumers were likely to have a lower need for cognition (Ailawadi et al. 2001). Consumers with lower need for cognition prefer to take short cuts or rely on their feelings and more positively react to a less complicated or short messages (Hoyer & MacInnis 1997). Therefore, education is expected to have a positive relationship with need for cognition. The relationship between these two variables is illustrated in Figure 2.5.

**Figure 2.5- The influence of education on need for cognition**



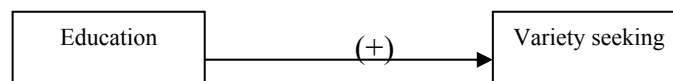
**Hypothesis 4: Education will positively influence variety seeking.**

Variety seeking was found to be influential in explaining consumer responses to sales promotions (Ailawadi et al. 2001). However, the association between this psychographic



characteristic and a particular demographic variable has not been strongly supported in the literature reviewed. Ailawadi et al. (2001), attempted to identify demographic variables that possibly related to variety seeking, but did not find any significant relationships between these two variables. However, an early study investigating variety seekers, found a positive relationship between education and variety seeking (Raju 1980). This study found that higher educated consumers were likely to seek more variety than lower educated consumers. Based on this previous research finding, we predict education to have a positive influence on variety seeking, as shown in Figure 2.6.

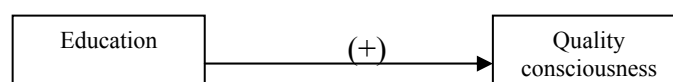
**Figure 2.6- The influence of education on variety seeking**



**Hypothesis 5: Education will positively influence quality consciousness.**

Education may also have a relationship with quality consciousness. Quality conscious consumers are likely to be better able to infer the level of a product's quality from the product's price (Erickson & Johansson 1985). They will be likely to view higher prices more favorably due to their perceptions of a corresponding increase in the product quality (Lichtenstein, Bloch & Black 1988). Higher educated consumers have been found to be more quality conscious than those who are lower educated (Ailawadi et al. 2001). As illustrated in Figure 2.7, education is therefore hypothesized to have a positive relationship with quality consciousness.

**Figure 2.7- The influence of education on quality consciousness**



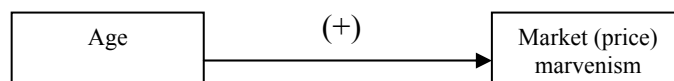
**Hypothesis 6: Age will positively influence market (price) mavenism.**

Price mavens have been shown to be a source of information in relation to product, price, and place for other consumers to shop for the lowest prices (Lichtenstein &

Ridgway 1993). They are extensively attentive to a wide range of information sources (Hoyer & MacInnis 1997), which is further used as a basis for their expertise (Higie, Feick & Price 1987).

It is expected that older athletic footwear consumers are more likely to be price mavens than younger athletic footwear consumers as they search more about relevant information, and are more likely to provide significant information to others. This expectation is supported by recent studies (Ailawadi et al. 2001; and Urbany, Dickson & Karapurakal 1996) that found similar associations between these two variables. Thus, as shown in Figure 2.8, age is hypothesized to positively influence price mavenism.

**Figure 2.8- The influence of age on market (price) mavenism**



- Hypothesis 7a: There is a difference in the level of motivation to conform to the expectations of reference groups across employment status, and**
- Hypothesis 7b: Age will negatively influence motivation to conform to the expectations of reference groups.**

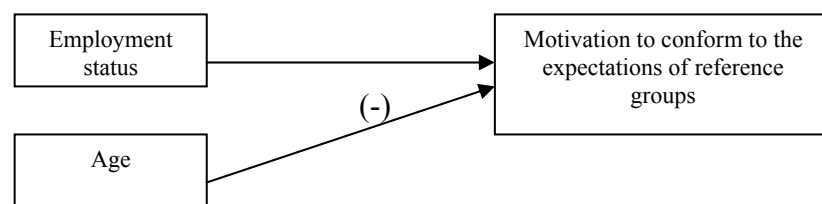
Two specific demographic characteristics, determined to be related with motivation to conform to the expectations of reference groups, are employment status and age. The relationships between these variables are illustrated in Figure 2.9. In relation to employment status, a difference in motivation to conform to the expectations of reference groups is expected to exist across employment status where, for example, students may be more concerned with their self-image than retired groups. They are more likely to interact with others and want to be a part of their social group (Mowen & Minor 1998).

In relation to age, younger consumers, particularly teenagers, may want to be independent but do not want to deviate too far from the group or to face the risk of being rejected (Schlossberg 1993). They need to gain more acceptance from their peers. However, research undertaken by Ailawadi et al. (2001) exploring the influence of demographic characteristics on the motivation to conform to the expectations of

reference groups, argued this suggestion and found that the older the consumers, the more they were likely to be motivated to conform to the expectations of their reference groups.

At this stage, we support the suggestion by Schlossberg (1993) and expect a negative relationship between age and the ‘motivation to conform’ variable. The researcher expects that younger consumers show more dependence on their reference groups than older consumers in relation to a purchase of athletic footwear. The direction of the relationship between these two variables will be further explored in the exploratory research (chapter 3) in order to determine if the proposed direction of this hypothesis is appropriate.

**Figure 2.9- The influence of employment status and age on ‘motivation to conform’**

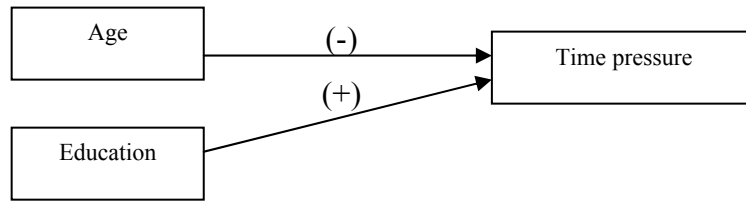


**Hypothesis 8a: Age will negatively influence time pressure, and**

**Hypothesis 8b: Education will positively influence time pressure.**

Consumers under time pressure might respond favorably to sales promotions because they could use sales promotional messages to simplify their buying process (Ailawadi et al. 2001). Time pressure has been previously shown to be related with age (Ailawadi et al. 2001) and education (Narasimhan 1984a). That is, younger consumers were more likely than older consumers to be under time pressure. And higher educated people appeared to be more pressured for time than lower educated people (Narasimhan 1984a). Therefore, as shown in Figure 2.10, we expect age and education to have a negative and positive relationship respectively, with time pressure.

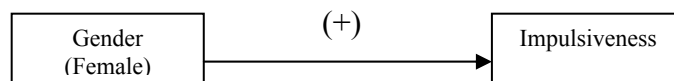
**Figure 2.10- The influence of age and education on time pressure**



**Hypothesis 9: Female consumers are more likely than male to be impulsive.**

Impulsiveness refers to the degree to which consumers buy a product on impulse or make an unplanned purchase when the urge strikes them (Ailawadi et al. 2001). Impulsive consumers tend to make a purchase decision quickly in-store with little decision-making effort (Peter & Olson 2002). A study found that female consumers were more likely than male to be impulsive (Ailawadi et al. 2001). Therefore, as illustrated in Figure 2.11, we expect this difference in impulsiveness between female and male to exist in this study.

**Figure 2.11- The influence of gender on impulsiveness**



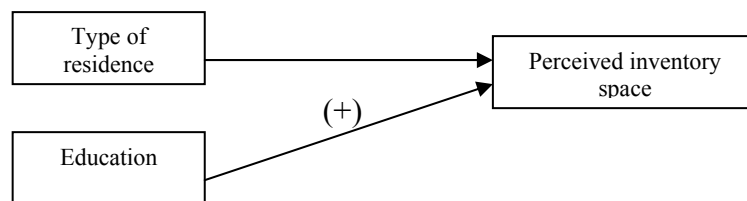
**Hypothesis 10a: There is a difference in perceived inventory space across type of residence.**

**Hypothesis 10b: Education will positively influence perceived inventory space.**

Having sufficient storage space makes it easier for consumers to buy a lot of discounted products (Ailawadi et al. 2001; Blatberg et al. 1978). It is expected that consumers living in a house are more likely than those living in an apartment or townhouse to have a positive relationship with perceived inventory space because they have more storage spaces and are in turn better able to stock up on the product. This expectation is supported by recent studies (Ailawadi et al. 2001) that found similar associations between these two variables. Thus, as shown in Figure 2.12, a difference in perceived storage space is expected to exist across type of residence.

In addition, perceived inventory space has been shown to be related with some demographic variables, namely: education. That is, higher educated consumers were less likely than lower educated people to perceive storage space constraints (Ailawadi et al. 2001). Therefore, education is hypothesized to have a positive relationship with perceived storage space, as illustrated in Figure 2.12.

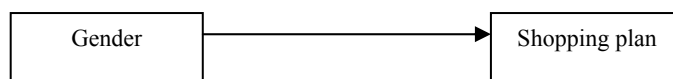
**Figure 2.12- The influence of type of residence and education on perceived inventory space**



**Hypothesis 11: Female consumers are more likely than male consumers to plan their shopping.**

Shopping plan is related to the utility in relation to improved convenience or search costs (Ailawadi et al. 2001). Consumers may use information of out-of-store promotions to plan their shopping (Ailawadi et al. 2001; Henderson 1985). Shopping plan has been found to have a relationship with gender. That is, female consumers were more likely than male consumers to plan their shopping (Ailawadi et al. 2001). Thus, it is expected that there is a difference in shopping plan between female and male consumers, as illustrated in Figure 2.13.

**Figure 2.13- The influence of gender on shopping plan**

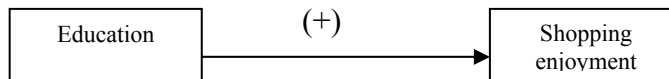


**Hypothesis 12: Education will positively influence shopping enjoyment.**

Shopping enjoyment is related to entertainment utility. Consumers who enjoy shopping are likely to be heavier users of featuring advertising and coupons (Ailawadi et al. 2001; Kolodinsky 1990) because they enjoy making use of marketing information (Ailawadi et

al. 2001). Shopping enjoyment has been found to have a relationship with some demographic variables, namely: education. That is, higher educated consumers were more likely than lower educated consumers to enjoy shopping (Ailawadi et al. 2001). Therefore, as shown in Figure 2.14, education is hypothesized to have a positive influence on shopping enjoyment.

**Figure 2.14- The influence of education on shopping enjoyment**



In brief, this section proposed preliminary hypotheses of the relationships between demographic and psychographic and normative influencing variables based on the relationships of these variables found in the literature. Some demographic and psychographic variables have not been proposed to have a relationship with a specific psychographic or demographic variable due to the lack of evidence in the literature to support the relationship of these variables. These factors include family size, presence of children for demographics, and brand loyalty (loyalty to other athletic footwear brands) and value consciousness for psychographics. The possible relationship of these variables will be further specified by the exploratory research. The exploratory research will be discussed in chapter 3. The discussion now moves to the key preliminary hypotheses justifying the influence of psychographic and normative influencing factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

**The influence of *psychographic* and *normative influencing factors* on consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

Psychographic characteristics in relation to perceived utility and normative influencers tend to play more important roles than demographic factors in explaining consumer responses to products promoted through sales promotions (Ailawadi et al. 2001; Blattberg & Neslin 1990; Mittal 1994). The psychographic and normative influencing factors have been found to vary in terms of their impact on consumer responses to sales promotions (Ailawadi et al. 2001; Mittal 1994). However, as the previous section indicated, these psychographic and normative influencing factors are in turn impacted on by consumer demographics.

Key perceived utilities, to be used for explaining the influence of the psychographic and normative influencing factors on the purchase intention variable, involve monetary savings, perceived quality of promoted products, perceived value of promoted products, improved convenience, exploration, self image expression, entertainment (Chandon et al. 2000), costs of switching (Ailawadi et al. 2001; Mittal 1994), and inventory holding costs (Ailawadi et al. 2001). Definitions of these utilities were previously summarized in Table 2.4.

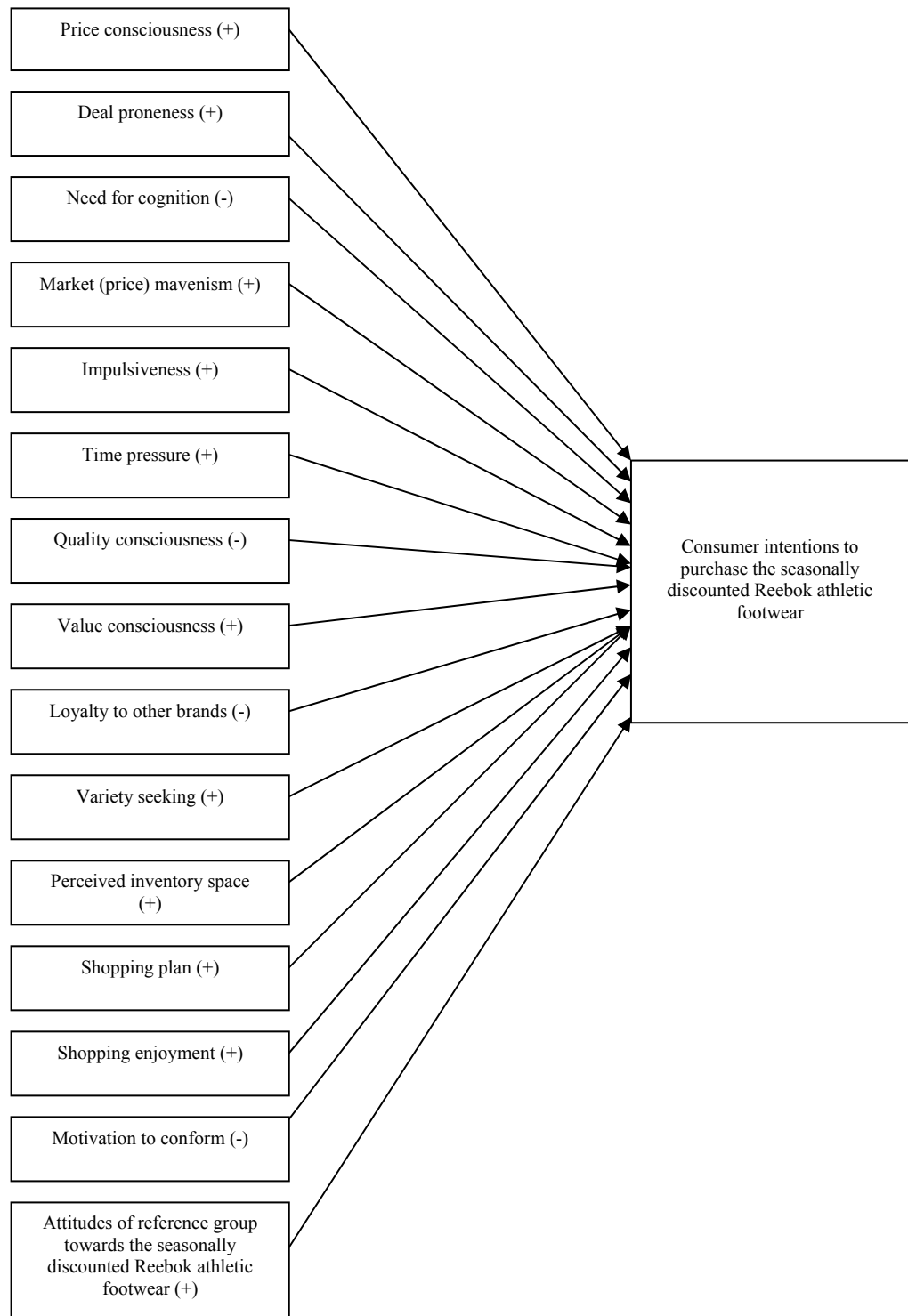
The following discussion proposes preliminary hypotheses predicting how psychographic and normative influencing factors influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear. All of these hypotheses are illustrated in Figure 2.15.

**Hypothesis 13a: Price consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

Monetary savings are the appropriate utility for explaining the relationship between price consciousness and the purchase intention variable. Monetary savings are a saving benefit that consumers may consider when buying a product promoted through sales promotions (Chandon et al. 2000). Price-discounted products yield this benefit to consumers because discounted products represent opportunities to obtain products at a reduced price (Wakefield & Bush 1998).

Empirical research suggested that consumers who seek monetary savings were likely to be price conscious (Ailawadi et al. 2001; Mittal 1994). Buying a discounted product is likely to satisfy price conscious consumers because they can receive immediate price savings from this purchase (Ailawadi et al. 2001). Based on these justifications, we posit that the more consumers become price conscious, the more they will intend to purchase the seasonally discounted Reebok athletic footwear.

**Figure 2.15- The influence of *psychographic* and *normative* influencing factors on purchase intentions**



Source: Developed for this thesis



**Hypothesis 13b: Deal proneness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

**Hypothesis 13c: Need for cognition will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

**Hypothesis 13d: Market (price) mavenism will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

**Hypothesis 13e: Impulsiveness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

**Hypothesis 13f: Time pressure will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

The influence of deal proneness, need for cognition, market (price) maven, impulsive, and time pressure characteristics, on the purchase intention variable can be explained based on the convenience utility. Convenience utility refers to the degree to which consumers perceive that a price discount can help them to reduce their search or decision costs by providing consumers with an easier decision heuristic for a product purchase (Wansink et al. 1998; Ailawadi et al. 2000).

Some studies found that *deal prone* consumers positively reacted to a promoted product. For example, sale proneness positively influenced purchase quantity of discounted products, amount spent and saved on discounted products (Lichtenstein & Ridgway 1993). Other studies indicated that coupon prone consumers were likely to develop positive attitudes towards coupon-promoted clothing brands (Cho & Kang 1998).

A price promotion may provide monetary saving utility to deal prone consumers, however, to explain the effect of deal proneness on the purchase intention variable, convenience utility could also be taken into account. That is, deal prone consumers are likely to increase propensity to respond to a purchase offer because a deal in the form of purchase offer positively influences purchase evaluations (Thaler 1983). Deal prone consumers may define value in terms of the existence of sales promotions and think of sale promotions as indicators of good deals without actually comparing a reduced price of the discounted brand with that of other brands (Zeithaml 1988).

Deal prone consumers have also been shown to purchase discounted products because they felt satisfaction in getting a good deal (Lichtenstein et al. 1990). In these cases, a price discount could help deal prone consumers to minimize their decision costs by providing them with an easier decision heuristic for a product purchase (Ailawadi et al. 2001; Wansink et al. 1998). Deal prone consumers made their choices based on the availability of sales promotions offered by various brands. They were likely to shift their consumption behavior to take advantage of the temporary incentive (Wakefield & Barnes 1996). We therefore expect a positive relationship between deal proneness and consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

In relation to *need for cognition*, consumers with a higher need for cognition have been shown to be less likely than those with lower need for cognition, to buy products promoted through out-of-store promotion, such as coupon redemptions (Ailawadi et al. 2001). An explanation for this behavior is that consumers with a higher need for cognition are more likely to think extensively about product, attributes, and benefits, as well as to scrutinize messages very carefully. Whereas those with a lower need for cognition prefer to take short cuts or rely on their feelings and more positively react to a less complicated or short messages (Hoyer & MacInnis 1997; Mowen & Minor 1998).

The seasonal discounting program of Reebok athletic footwear tends not to have a complicated promotional message. Therefore, we expect that consumers with a lower need for cognition will be less likely to carefully evaluate price off promotions, and in turn will be more likely to respond favorably to the seasonally discounted Reebok athletic footwear than those with a higher need for cognition.

For *Market (price) mavenism*, price mavens act as a source of information in relation to product, price, and place for other consumers to shop for the lowest prices (Lichtenstein & Ridgway 1993). They extensively attend to a wide range of information sources (Hoyer & MacInnis 1997). In the price promotion context, price mavens have been seen to be less likely than those who were less knowledgeable, to rely on promotional information in evaluating alternative brands (Inman, Peter & Raghuram 1997). However, other research argued this finding suggesting that price mavens would be heavier users of promotions, such as coupons (Ailawadi et al. 2001; Price, Feick & Guskey-Federouch 1988).

Due to this unclear evidence in the direction of the relationship between these two variables in this literature, the exploratory research to be conducted (chapter 3) will assist the researcher to clarify the relationship between these two variables. At this stage, it is expected that price mavenism will positively impact purchase intentions due to convenience utility where these consumers may realize that they do not have to spend more time and effort on searching for the next price promotion.

Turning to the *impulsiveness*, positive relationships have been found between impulsiveness and in-store promotions (Ailawadi et al. 2001). However, impulsive consumers have also been found to respond unfavorably to sales promotions that require preparation before the shopping trip (Ailawadi et al. 2001) because impulsive consumers are less likely to enter the decision making process completely by forming perceptions and thinking deliberately prior to purchase a product. It appears they would rather quickly develop a positive attitude towards a purchase, and decide to buy a product they have not planned on buying, at the point of purchase (Hoyer & MacInnis 1997; Mowen & Minor 1998; Rook & Fisher 1995). Applying this concept to the sales promotion context, these consumers are therefore likely to easily, immediately, and strongly associate with sales promotions that require little decision effort from them.

As the seasonal discounting program of Reebok athletic footwear is a basic and uncomplicated sales promotional program, it is expected that the more impulsive consumers are, the more they will be likely to respond positively to this promotion. In turn, they will have more intentions to purchase the seasonally discounted Reebok athletic footwear.

*Time pressured* consumers have been shown to be less likely to favorably respond to specific sales promotions, such as coupon redemptions, because coupon redemptions require ongoing effort from consumers (Bawa & Shoemaker 1987), and these consumers are unlikely to have time for clipping, organizing, and redeeming coupons (Mittal 1994). However, time pressured consumers might respond positively to other in-store sales promotions, such as price reductions, because these promotions enable them to save time by providing easily recognizable cues for simplifying the purchase decision process (Ailawadi et al. 2001). Thus, time pressure is expected to have a positive relationship with the purchase intention variable.

**Hypothesis 13g: Quality consciousness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

The researcher applies the product quality concept of utility theory (Thaler 1975) to explain the relationship between quality consciousness and the purchase intention variable. How consumers respond to price promotions is also partly explained by their perceptions of the product quality in relation to the price they pay for that product (Ailawadi et al. 2001; Lichtenstein & Ridgway 1993).

Consumers may pay attention to the product quality, and therefore become quality conscious, perceiving the price of a product positively and inferring that the level of the price is positively related to the level of product quality (Erickson & Johansson 1985; Lichtenstein & Ridgway 1993). These consumers will view higher priced products more favorably due to their perceptions of an increase in product quality for additional monetary payment (Lichtenstein et al. 1988; Lichtenstein & Ridgway 1993). Following this, quality conscious consumers are unlikely to respond favorably to price-discounted brands because the discounted brands offers consumers lower priced products, which in turn are perceived to be inferior in quality (Ailawadi et al. 2001; Cunningham, Hardy & Imperia 1982; Richardson et al. 1994). Therefore, we predict a negative relationship, that is, the more quality conscious consumers are, the less they will intend to purchase the seasonally discounted Reebok athletic footwear.

**Hypothesis 13h: Value consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

Perceived value of a purchase of discounted products can be used to explain the relationship between value consciousness and purchase intentions. In contrast to quality conscious consumers, value conscious consumers are likely to have a wider area of acceptance of a discounted product because they are unlikely to perceive that the level of product price directly indicates the level of product quality. They are likely to be concerned with the ratio of the quality received to the price paid in a purchase transaction (Lichtenstein et al. 1990; Tellis & Gaeth 1990), and they also have a desire

to maximize the quality received for the price paid for that product (Lichtenstein et al. 1990).

A price promotion program not only leads value conscious consumers to perceive additional value for their money (higher ratio of quality received to price paid), but also enables these consumers to relax their budget constraints, and to upgrade to a better product (Chandon et al. 2000). With these justifications, it is expected that value consciousness will have a positive influence on the purchase intention variable.

**Hypothesis 13i: Loyalty to other athletic footwear brands will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

Brand loyal consumers tend to be consistent purchasers, holding strong perceptions in relation to the quality of the brand they buy (Hoyer & MacInnis 1997). They believe their favorite brand best meets their overall needs (Hawkins et al. 1998), and they therefore commit and form an emotional attachment to that brand (Hawkins et al. 1998; Mowen & Minor 1998). Therefore, they are less likely to be involved in making a decision about which brand to buy because they already believe their brand is the best in the market (Hoyer & MacInnis 1997).

To explain the influence of brand loyal characteristics on consumer responses to products promoted through sales promotions, the concept of costs of switching could be applied (Ailawadi et al. 2001; Mittal 1994). Costs of switching refer to the degree to which consumers feel risky when they purchase an untried brand (Blattberg & Neslin 1990; Cunningham 1966).

Brand loyal consumers are likely to feel a greater degree of switching costs (Ailawadi et al. 2001) because they believe that they may risk a large loss in potential utility from having to substitute a less-preferred brand for their favorite brand (Bawa & Shoemaker 1987). Risks consumers might face in purchasing a less-preferred brand could be the uncertainty about how the brand would perform, and the consequences of poor performance (Blattberg & Neslin 1990; Cunningham 1966).

Brand loyal consumers tend to perceive that they already get a good deal from buying the preferred brand than those who are less loyal. Thus, they are unlikely to be interested in other brands' marketing efforts, and switch to other brands (Wakefield & Barnes 1996). Based on these justifications, we predict that the more consumers are loyal to other athletic footwear brands; the less they would perceive advantageous of the seasonally discounted Reebok athletic footwear due to their higher costs of switching. Thus they will be less likely to intend to purchase the seasonally discounted Reebok athletic footwear.

**Hypothesis 13j: Variety seeking will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

The influence of variety seeking on consumer responses to price promotions can be explained by the concept of perceived exploration utility (Ailawadi et al. 2001). Exploration benefits exist when buying a product helps consumers to fulfill their own intrinsic needs for information, variety, or innovativeness (Baumgartner, Steenkamp & Steenkamp 1996; Kahn & Louie 1990; Kahn & Raju 1991).

Variety seekers are consumers who are still satisfied with their existing brands but just have the desire to switch to a different brand (Hoyer & MacInnis 1997) simply for a change of pace and to relieve boredom (Steenkamp & Baumgartner 1992). Boredom incurs when their purchasing is repetitive and this in turn causes the internal level of stimulation to fall below the internal ideal level of arousal (Joachimsthaler & Lastovicka 1984). Consumers are normally motivated to maintain their optimum level of stimulation by acting to correct the level, for example buying a new brand. Thus they can feel better (Mowen & Minor 1998).

Variety seeking consumers are likely to try different products and/or brands (Peter & Olson 2002). These consumers have been found to respond positively to products promoted through sales promotions (McCann 1974; Wakefield & Barnes 1996) because sales promotions encourage them to try the promoted product (Ailawadi et al. 2001; Montgomery 1971).

In this research, variety seekers are expected to respond favorably to the seasonally discounted Reebok athletic footwear as the seasonal discounting program will encourage them to try the Reebok athletic footwear in order to fulfill their needs for variety and reduce their boredom.

**Hypothesis 13k: Perceived inventory space will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

The influence of perceived inventory space on purchase intentions can be explained based on the concept of inventory holding costs. Inventory costs are related to the perceived availability of storage space (Ailawadi et al. 2001). Consumers who have sufficient storage space are likely to respond favorably to products promoted through sales promotions because they are less likely to perceive storage space constraints and they can then stock up on the discounted products (Blattberg et al. 1978). Perceived inventory space has been found to have a positive relationship with consumer responses to products promoted through in-store and out-of-store promotions (Ailawadi et al. 2001). Therefore, it is expected that perceived inventory space will positively influence purchase intentions.

**Hypothesis 13l: Shopping plan will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

Shopping plan is related to search costs (improved convenience utility). Consumers who respond favorably to discounted products are likely to perceive that sales promotional programs can help them to reduce search costs by providing them with an easy decision heuristic for a product purchase (Ailawadi et al. 2000; Wansink et al. 1998).

Shopping plan has been found to have a positive relationship with in-store and out-of-store sales promotions (Ailawadi et al. 2001). Consumers who plan their shopping are likely to consider out-of-store promotions because these promotions encourage planning that in turn reduce consumers' searching effort (Ailawadi et al. 2001; NCH Nuworld 1999). For in-store promotions, consumers who plan their shopping can use promotion schedules to plan their purchases so they know how much to buy to last until the next

promotion (Krishna, Currim & Shoemaker 1991). We therefore expect a positive association between shopping plan and purchase intentions to exist in this research.

**Hypothesis 13m: Shopping enjoyment will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

The relationship between shopping enjoyment and the purchase intention variable can be explained based on the entertainment utility. Some consumers are likely to have fun or feel enjoyable when watching or participating in particular sales promotions, such as sweepstakes, contests, and free gifts (Ailawadi et al. 2001; Chandon et al. 2000). Both in-store and out-of store sales promotions could provide marketing information that shopping enthusiasts would enjoy processing (Ailwadi et al. 2001). Consumers who enjoy shopping have been shown to react favorably to feature advertising and coupon promotions (Kolodinsky 1990). Therefore, shopping enjoyment is expected to have a positive relationship with purchase intentions.

**Hypothesis 13n: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will positively influence consumers' purchase intentions.**

**Hypothesis 13o: Motivation to conform to the expectations of reference groups will negatively influence consumers' purchase intentions.**

These hypotheses are proposed to test the effect of normative influencing factors on purchase intentions. Based on the theory of reasoned action (Fishbein & Ajzen 1975), normative influencing factors, specifically reference group, could also influence how a consumer responds to marketing messages. A group influence is likely to be strong for athletic footwear products because the use of this product is highly visible to reference groups (Hawkins et al. 1998). The concept of self-expressive utility relating to group affiliation could be applied in explaining group influences (Chandon et al. 2000) because consumers may evaluate whether they gain or lose their sense of being a part of their reference group when purchasing the seasonally discounted Reebok athletic footwear.

Group influences depend on the degree to which consumers commit to the group. The more consumers need to be a part of the group, the more they will conform to group



norms (Hawkins et al. 1998). If consumers conform to group norms, they will take into account norms of their reference group, and tend to behave accordingly (Shimp & Kavas 1984). In this research, two normative influencing factors including *motivation to conform to the expectations of reference groups* and *attitudes of reference groups towards the seasonally discounted Reebok athletic footwear* will be examined to determine whether they are influential in explaining consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

Empirical research investigating the effect of self-expression, conformity, and social approval in consumer responses to promotions found a positive relationship between attitudes of reference groups and coupon uses and sweepstake participations (Huff & Alden (1998). In relation to the variable of ‘motivation to conform’, a more recent study found a negative relationship between ‘motivation to conform’ and consumers’ use of products promoted through out-of store promotions (Ailawadi et al. 2001). Applying these into the athletic footwear context, it is therefore expected that attitudes of reference groups towards the seasonally discounted Reebok athletic footwear and motivation to conform to the expectations of reference groups will have a positive and a negative influence on consumer intentions to purchase the seasonally discounted Reebok athletic footwear respectively. Next, the discussion turns to the effect of all consumer characteristics on purchase intentions.

### **The influence of all antecedent consumer characteristics on the purchase intention variable**

**Hypothesis 14: There will be no relationships between all of the antecedent factors (eight demographic, thirteen psychographic, and two normative influencing factors) and the purchase intention variable.**

Previous research has applied utility theory and the theory of reasoned action differently and thus has investigated different sets of demographic and psychographic characteristics relating to these two theories. It appears that none of the previous studies have simultaneously investigated the effect of all possible consumer characteristics on consumer response variables. To fill this gap, included in this hypothesis are all of the antecedent consumer characteristics found as the influential factors in the literature. All of these antecedent factors will be tested in order to identify key consumer

characteristics that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear. In addition, this research will also examine the relative importance of these factors when they are incorporated together to explain the variance of the purchase intention variable.

In summary, this section identified key influential antecedent consumer characteristics and purchase intentions as the single key response variable to be investigated in this thesis. Consumer characteristics include eight *demographic characteristics* (**age, gender, income, employment, family size, presence of children, education, and type of residence**); thirteen *psychographic characteristics* (**price consciousness, value consciousness, quality consciousness, market (price) mavenism, loyalty to other athletic footwear brands, variety seeking, time pressure, impulsiveness, need for cognition, deal proneness, perceived inventory space, shopping plan, and shopping enjoyment**); and two *normative influencing factors* (**motivation to conform to the expectations of reference group, and attitudes of reference group towards the seasonally discounted Reebok athletic footwear**).

Preliminary hypotheses were then developed, based on the relationships of these variables found in the literature, utility theory (Thaler 1985), and the theory of reasoned action (Fishbein & Ajzen 1975). These hypotheses are to test firstly; the influence of the demographic variables on the psychographic and normative influencing variables, secondly; the influence of psychographic and normative influencing variables on the purchase intention variable, and lastly the influence of all of these antecedent consumer characteristics on purchase intentions. In addition to identifying key influential factors, this research also aims to determine the relative importance of these consumer characteristics when they are incorporated together to explain consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

## **2.5 Conclusions**

There have been increasing attempts to study consumer characteristics and the influence of these factors on consumer responses to sales promotions during the recent years because the knowledge gained would assist marketing organizations in understanding how those factors related to differences in consumer responses to promoted products (Lichtenstein et al. 1995). This understanding in turn assists researchers to identify

consumers who may favorably respond to their sales promotions (Wakefield & Barnes 1996).

The predominant theme in this discipline is sales promotions targeted to end consumers. The specific theme that has developed in this literature is consumer responses to products promoted through sales promotions. This literature explored the two key behavioral theories most relevant to this research topic, namely: utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975). Reviewing relevant theories becomes of importance as it suggests key antecedent and response variables necessary to be included in this research, and prevents a researcher from achieving spurious research findings (Blattberg et al. 1978).

The literature addressed numerous consumer characteristics that have been seen to be related to consumer responses to products promoted through sales promotions. These characteristics include eight *demographic characteristics* (**age, gender, income, employment, family size, presence of children, education, and type of residence**); thirteen *psychographic characteristics* (**price consciousness, value consciousness, quality consciousness, market (price) mavenism, loyalty to other athletic footwear brands, variety seeking, time pressure, impulsiveness, need for cognition, deal proneness, perceived inventory space, shopping plan, and shopping enjoyment**); and two *normative influencing factors* (**motivation to conform to the expectations of reference group, and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**).

In addition, preliminary hypotheses depicting the influence of these factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market were developed, based on the two behavioral theories discussed above, and the findings of research reviewed in the literature. However, as these factors have emerged mostly from research undertaken within the contexts of western countries (not the Thai market) and of grocery products mainly promoted through coupon sales promotions, and as the possible relationship of some variables (family size, presence of children, value consciousness, and loyalty to other athletic footwear brands) needs to be further specified, exploratory research will be conducted next. This exploratory research assists to determine the appropriateness of the inclusion of these consumer characteristics in

this research that focuses on the athletic footwear context, and to specify a possible relationship of the variables mentioned above. Now the discussion turns to the methodology and key findings of the exploratory research.

## CHAPTER 3

### Exploratory Research

#### 3.1 Introduction

The literature reviewed in the previous chapter provided insights into consumer characteristics and their influences on consumer responses to sales promotions. These characteristics can be broadly categorized into demographics, psychographics in relation to perceived utility, and normative influencing factors. However, there is a lack of empirical support for the nature of relationships between consumer characteristics and the influences these factors have on consumer intentions to purchase the seasonally discounted athletic footwear at the brand level (Reebok brand), specifically in Thailand. Therefore, the underlying constructs related to the context mentioned have not been well defined. In addition, for some variables reviewed in the previous chapter (family size, presence of children, value consciousness and brand loyalty), there is a lack of information that can be used to develop a hypothesis proposing the relationship between these variables and other psychographic or demographic variables. Consequently, further research is necessary to:

- explore relevant consumer characteristics and justify how these factors possibly influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market;
- specify the psychographic or demographic variables that could possibly be related with family size, presence of children, value consciousness, and brand loyalty (in specific loyalty to other athletic footwear brands);
- determine the appropriateness of the use of purchase intentions as the key response variable; and
- determine if the influence of demographic factors on the key response variable(s) is mediated by psychographic factors.

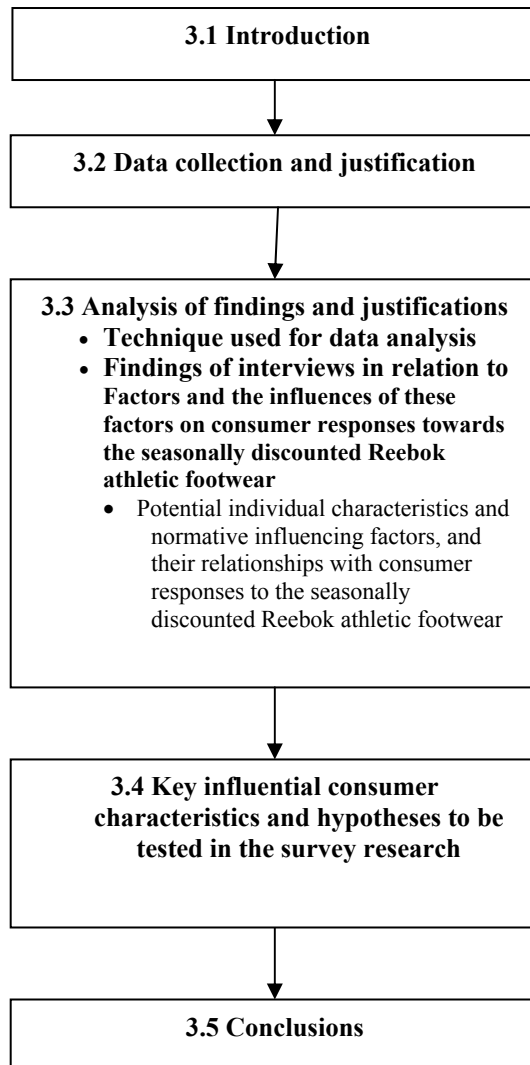
How researchers investigate a phenomenon is dependent on how they create meanings of the world or on which paradigm(s) they rely (Guba & Lincoln 1994; Neuman 1997). There are four alternative paradigms relevant to social research, namely: critical theory; constructivism; positivism; and critical realism. These research paradigms have specific purposes of investigation (Guba & Lincoln 1994), which are addressed next.

The purpose of studies conducted under the critical theory is to critique and to transform social or cultural structures. In addition, research conducted from the ground of the constructivist paradigm aims to understand the world meanwhile studies, conducted under the positivist or the critical realism paradigm, attempts to predict or explain a phenomenon (Guba & Lincoln 1994). Detailed discussions of these paradigms and the research methodologies relevant to each of these paradigms will be addressed in section 4.2.

Exploratory research, conducted under the constructivist paradigm, was deemed the most appropriate approach for this stage of research as this type of research helps the researcher develop a more complete understanding regarding the research context to be investigated. More specifically, this exploratory research will be employed to clarify concepts (Churchill 1995; Hair et al. 2000; Zikmund 1997), and to formulate more precise investigation for developing hypotheses (Churchill 1995). The knowledge gained from this exploratory research will contribute to the development of a standardized interview in the typical large-scale survey (Oppenheim 1992).

The exploratory research, as described in the remainder of this chapter, is organized into four sections. Data collection and justification is discussed in section 3.2. Analysis of findings and justification are presented in section 3.3. Then, the discussion moves to the selection of the key influential consumer characteristics and a summary of hypotheses to be tested in the survey research (section 3.4). Conclusions appear in section 3.5. An outline of this structure for the chapter is presented in figure 3.1.

**Figure 3.1**  
**Outline of chapter 3**



Source: developed for this thesis

### **3.2 Data collection and justifications**

In this section, major topics to be discussed include types of interview techniques, characteristics of respondents, a series of questions and interviews, and how to reduce biases and to gain rapport with respondents. These topics are discussed in turn.

Exploratory research can include techniques such as: literature research (secondary data); experience surveys; case studies; and pilot studies (Zikmund 1997). Specifically, a pilot study could be conducted using focus group interviews, projective techniques, and in depth interviews. Key characteristics of these techniques are summarized in Table 3.1.

**Table 3.1- Exploratory research techniques and their key characteristics**

<b>Technique</b>	<b>Key characteristics</b>
Literature research (secondary data)	<ul style="list-style-type: none"><li>• Preliminary review of secondary data collected for another purpose to clarify issues in the early stages of a research effort</li></ul>
Experience surveys	<ul style="list-style-type: none"><li>• Individuals who are knowledgeable about a particular research problem are surveyed</li></ul>
Case studies	<ul style="list-style-type: none"><li>• Intensive investigation into one or a few situations similar to the problem under investigation</li></ul>
Pilot study	<ul style="list-style-type: none"><li>• Small-scale exploratory research technique that uses sampling, but does not apply rigorous standards, generates primary data, normally collected from employees, consumers rather than from a few knowledgeable experts or from a case situation.</li></ul>
Focus group interviews	<ul style="list-style-type: none"><li>• Unstructured, free-flowing, group dynamics sessions</li><li>• Allow each respondent the opportunity to initiate the topics of discussion</li><li>• Spontaneous interaction among respondents</li></ul>
Projective techniques	<ul style="list-style-type: none"><li>• Indirect means of questioning respondents (i.e. word association test, sentence completion test, and role playing)</li><li>• Assume that true answers are not expressed when respondents are directly questioned</li></ul>
In depth interviews	<ul style="list-style-type: none"><li>• Unstructured, extensive interviews, one-to-one interaction</li><li>• Encourage respondent to talk freely and in depth about an undisguised topic</li></ul>

Source: developed for this thesis from Zikmund 1997

Literature research has already been conducted and the results of the literature research have been presented in the previous chapter. A number of influential factors found in the literature will be further explored in this exploratory stage in order to identify and include only key consumer characteristics that are most relevant to the context to be researched.

Experience surveys were not employed because this research technique is likely to be used only to generate basic ideas about the research problems (Zikmund 1997), rather than to collect the detailed information required for this stage of research. Case studies were considered to be inappropriate because it is unlikely that the researcher would gain the information required from other sources except those who have this information (Zikmund 1997). Projective techniques were not used because direct questions would be more suitable than disguised questions or role-playing techniques, and could be employed to gain the information required from respondents (Zikmund 1997).

Focus group interviews were not deemed appropriate because this interview technique is likely to be conducted with consumers who have similar characteristics (Malhotra, Hall, Shaw & Crisp 1996), rather than with specific knowledgeable subjects who will be interviewed in this research. Justifications of the selection of the specific knowledgeable



subjects will be given later in this section. Focus group interviews have particular shortcomings, specifically in aspects of the respondents included in focus group interviews. That is, certain respondents might dominate the interviews (Zikmund 1997) or they might feel uncomfortable when they sense that their opinions differ from that of the rest of the group, and they in turn might not give a true opinion on the questions investigated (Oppenheim 1992). These shortcomings of the focus group interview technique would lead the researcher to produce biased research results (Zikmund 1997). Pilot studies are small-scaled research that should be conducted with subjects of ultimate concern, such as consumers, or employees, rather than with a few knowledgeable experts (Zikmund 1997).

Due to the nature of the objectives of this exploratory research, target respondents should have a clear understanding of psychological characteristics of consumers, and should be able to analyze and explain how these factors internally drive consumer responses to the seasonally discounted Reebok athletic footwear. Athletic footwear consumers have not been considered as the appropriate source of the data required because they might not be familiar with this complicated information, and in turn might not be able to give accurate opinions on this subject due to a lack of a clear understanding of how these factors actually influence their behaviors. Rather than gathering this information from athletic footwear consumers, it was therefore decided to use in depth interviews, and to collect information from experts who actually have sufficient knowledge and analytical skills in relation to the information required. Advantages of this research technique are discussed next.

In depth interviews with knowledgeable persons who are familiar with the subject being investigated should provide insights into variables and their relationships (Churchill 1995). In addition, in depth interviews allow one-to-one interaction, which enables the researcher to eliminate possible shortcomings of the focus group interview technique previously discussed (Zikmund 1997). In depth interviews can also be adopted to supply ideas as well as to identify the variables to be measured for new scales (Oppenheim 1992). Thus, in depth interviews have been deemed to be suitable for the nature of information required in this study.

The selection and targeting of knowledgeable persons who can serve the research purposes is not done on the basis of representativeness, but rather on the basis of whether they can offer the contributions sought. Thus, a non-probability based judgment sampling technique (also referred to as the purposive sampling technique) was employed (Churchill 1995; Hair et al. 2000; Zikmund 1997). As previously discussed, respondents to be interviewed should be able to understand, analyze, and give reasonable answers about the information required.

Therefore, all key experts, who have been directly responsible for collecting and analyzing information regarding characteristics of consumers of Reebok and other key athletic footwear brands from time to time, and have frequently used this analytical information in their marketing analysis works, were chosen for these interviews. They included four marketing executives (three from the marketing department of Reebok and one from the merchandising section of Super Sports, the largest retail chain of athletic products in the Thai market). In addition, findings of interviews conducted with companies from both the brand and channel of distribution perspectives were deemed likely to provide a complete picture of factors that might influence consumer responses to the seasonally discounted Reebok athletic footwear in the Thai market.

The interviews followed a semi-structured-undisguised approach, allowing respondents to understand the purpose of the research and to talk freely (Churchill 1995). Rather than collecting data through the telephone, face-to-face interviews were adopted as questioning would be likely to be more versatile (Zikmund 1997). There were two interview sessions. The first interviews were conducted with respondents to gain opinions on each of the interview questions. Collected data were analyzed and any other issues additionally raised by any respondent(s) were identified. The second interviews were then conducted with the same respondents to gain respondents' opinions on those additional issues, particularly, their opinions on the influential consumer characteristics not developed from the literature, but additionally suggested by any respondent(s) in the first interview session. These two interview sessions lasted about two and a half hours respectively, were conducted in a meeting room at the respondents' office, which allowed interviews to be private, quiet, comfortable, and confidential. With the respondents' permission, the interviewer recorded the interviews on tape so data collected could be analyzed in detail afterwards (Oppenheim 1992).

A series of questions were prepared to form a basis for the interviews, which are included in Appendix 3.1. Questions were developed to gain information that the researcher could use to achieve objectives of this exploratory research. Table 3.2 summarizes research questions relevant to each research objective. Major constructs and variables used in the questions, were developed from a review of the literature on consumer characteristics that influence consumer responses to sales promotions (such as Aliwadi et al. 2001; Hawkins et al.1998; Huff & Alden 1998; Lichtenstein & Ridgway 1993; Mittal 1994; Mowen & Minor 1998; Wakefield & Barnes 1996; Wakefield & Bush 1998). The definitions of these variables are summarized in Appendix 3.2.

**Table 3.2- Summary of questions relevant to objectives of the exploratory research**

Research objectives	Questions
<ul style="list-style-type: none"> <li>• Explore relevant consumer characteristics and justify how these factors possibly influence consumer responses to the seasonally discounted Reebok athletic footwear in the Thai market.</li> <li>• Specify the psychographic or demographic variable that could possibly be related with family size, presence of children, value consciousness, and brand loyalty (in specific loyalty to other athletic footwear brands).</li> </ul>	<p>Q1.From the list of demographic, psychographic, and normative influencing factors provided, respondents were asked to identify and to determine the relative importance of the factors that they believed would impact consumer responses to the seasonally discounted Reebok athletic footwear in the Thai market. In addition, they also identified the variables that they believed would be related with family size, presence of children, value consciousness, and brand loyalty.</p>
<ul style="list-style-type: none"> <li>• Determine the appropriateness of the use of purchase intention as the key response variable.</li> </ul>	<p>Q2.Respondents were asked to identify and justify which variables they believed would be the key response variables to be measured (purchase intentions, or attitudes, or perceptions).</p>
<ul style="list-style-type: none"> <li>• Determine if the influence of demographic factors on the response variable(s) is mediated by explored psychographic factors.</li> </ul>	<p>Q3.From the two behavioral frameworks (see the Appendix 3.3), respondents were asked to identify which framework they believed better explained the influences of factors on consumer responses to the seasonally discounted Reebok athletic footwear.</p>

Source: developed for this thesis

Interview questions were sequenced using the funnel technique (see Appendix 3.1). That is, the interview procedure moved from general to more specific questions (Cooper & Schindler 2001). To gain a few moments of respite, and to get the respondent settled into a question-answering mode, the interviews began with wide-open, highly projective general questions (Oppenheim 1992), for example, about respondents' general responsibilities in the company. The discussion then moved to more relevant issues, for instance, questions about their responsibilities regarding sales promotions, the athletic footwear market, target consumers, key sales promotions commonly used by major athletic footwear brands, and their perception of Reebok brand and its sales promotional campaigns. Following this background, respondents were given a list of the key

consumer characteristics and their definitions. They were then asked to identify and justify key relevant consumer characteristic factors that could influence consumer responses to the seasonally discounted Reebok athletic footwear, key consumer responses to be measured, and the framework explaining the influence of factors on consumer responses to the seasonally discounted Reebok athletic footwear. The interviews finished with a discussion regarding the current and future trends in sales promotions.

During the interviews, care was taken to minimize bias. Interviewer bias exists when interviewer has an influence on respondents' answers. The interviewer would try to be unaffected by circumstances, by their attitude to the topic or the respondent, or by personal involvement (Oppenheim 1992). The risk of interviewer bias might become highest when probes are employed for asking the respondent to explain further about something stated earlier. To reduce this risk, such probes were as nondirective as possible (Oppenheim 1992). In addition, respondents themselves can cause a bias when they do not comprehend or when they misunderstand the question. Rapport was maintained with respondents to reduce respondent bias. The interviewer also remained detached, professional, relaxed, friendly, promised confidentiality and avoided exerting pressure on or arousing respondent thought. The interviewer explained how respondents were selected and agreed to send a copy of the research results to those who requested it (Oppenheim 1992).

The interviews were completed within a 65-day time frame. A detailed listing of main activities and allocated time for each activity is shown in Table 3.3.

**Table 3.3- Schedule of the exploratory research**

Activities	Time frame (days)
Exploratory research: In depth interviews	
- Develop questions	10
- Conduct interviews	20
- Data preparation and analysis	20
- Report	15
Total	65 days

Source: developed for this thesis

### **3.3 Analysis of findings**

In this section, the technique for analyzing the responses of those interviewed is discussed. Findings of the exploratory research conducted with Reebok and Super Sports executives are also presented.

The analysis of the interviews commenced with transcribing the data recorded. The technique of content analysis was adopted because this analysis technique enables the researcher to gather and analyze any messages that are communicated in written, visual, or spoken form (Neuman 1997). Content analysis can be used for many purposes of analysis, such as identifying themes in advertising messages, exploring gender differences in conversation, as well as clarifying and categorizing answers to open-ended survey questions. This technique could be used to turn the data collected from these interviews into a precise, objective, and quantitative form (Neuman 1997).

In content analysis, one or more of four characteristics of text content can be measured, namely: frequency; direction; intensity; and space (Neuman 1997). Meanings of these characteristics are summarized in Table 3.4. The size or amount of the collected information was not analyzed in this exploratory research. Therefore, only frequency, intensity, and direction were the key characteristics being measured.

To measure the frequency characteristic, factors were identified by respondents and were classified as either influential or not influential in explaining consumer responses to the seasonally discounted Reebok athletic footwear. The relative importance of influential factors rated by respondents was measured and compared within a group of factors. This technique enabled the researcher to view the intensity characteristic of the collected data. The direction of messages in the content along the supporting or opposing continuum was also measured for answers to questions regarding influences of factors identified in relation to consumer responses to the seasonally discounted Reebok athletic footwear.

**Table 3.4- Summary of meanings of characteristics of text content**

<b>Characteristics</b>	<b>Meaning</b>
Frequency	Counting whether or not the investigated item occurs, and if it occurs, how often.
Direction	The direction of messages in the content along some continuum (i.e. positive or negative, supporting or opposed).
Intensity	The strength or power of a message in a direction (i.e. the characteristic of interested item can be minor or major).
Space	The size of a text message or the amount of space or volume allocated to it (i.e. counting words, sentences).

Source: developed for this thesis from Neuman 1997

Data collected from interviews can be coded either by using computer software programs such as NUD\*IST or it can be done manually (Carson, Gilmore, Gronhaug &

Perry 2001). In this research, the researcher manually coded the data as using the software may cause the loss of sensitivity by the researcher to the data (Hastings 2000).

The researcher scanned the transcripts to carefully view the comments for ideas, opinions or thoughts raised by the respondents. Key comments to each factor were compared across the respondents to find common or contrasting ideas. This data comparison technique allows the researcher to interpret the data generally, easily, and efficiently. Next, the discussion moves to an overview of athletic footwear in the Thai market and the key findings of interviews.

### **3.3.1 Overview of athletic footwear in the Thai market**

When asked to identify the key athletic footwear brands of the Thai market, all respondents mentioned three international brands, namely: Nike; Adidas; and Reebok, as the key brands holding over 50% of the total market share of this product. Other international brands such as Converse, Diadora, K-Swiss, New Balance, and Fila, were considered to be less important. When asked about the local brands, in all cases the respondents viewed local brands as indirect competitors because student footwear were their main product, targeted to a different market. One Reebok respondent mentioned local brands as low priced products. International brands such as Nike, and Reebok once tried to enter the student shoe market but were unsuccessful due to the strong price competition.

The market size of international brands is 1.5 billion baht (\$ US 33 million). Reebok respondents identified Nike as the market leader with 20-22% of the market share followed by Adidas and Reebok with a market share of 19% and 8-10% respectively. However, according to Super Sports' sales volume worth 300 million baht in 2000, the market share differed in that 40% was for Nike, 25% and 10% for Adidas and Reebok respectively. The Super Sports respondent explained that Super Sports targeted its business to the upper income consumers and teenagers. These consumers tended to prefer Nike to the other brands. When asked about characteristics of target consumers, income, age, and psychographics were used as key criteria for describing consumer characteristics, which are summarized in Table 3.5.

**Table 3.5- Target consumers of three major athletic footwear brands**

Key consumer characteristics	Nike	Adidas	Reebok
Demographics	Teenagers (12-19 years old) and working people (20-30 years old), have upper income.	Working people, 18-35 years old, have middle or lower income	Working people, 18-35 years old, have middle or lower income. And female consumers for fitness footwear
Psychographics & personality	<ul style="list-style-type: none"><li>• Brand loyalty</li><li>• Self confidence</li><li>• Fashionable &amp; emotional conscious</li><li>• Innovative</li><li>• High product knowledge</li></ul>	<ul style="list-style-type: none"><li>• Sport players</li><li>• Conservative</li></ul>	<ul style="list-style-type: none"><li>• Rational</li><li>• Value consciousness</li><li>• Not very fashionable</li><li>• Not very conservative</li></ul>

Source: Developed for this thesis

When asked about the key sales promotions commonly used by athletic footwear brands, all respondents identified seasonal price discounting programs as the most commonly employed sales promotional technique. A general comment was that athletic footwear was a seasonal product. Products with major changes in design and colors were launched at the first and third quarters whereas products with minor changes were marketed heavily in the second and fourth quarters of a year. Therefore, major sales promotions were required to reduce inventories of out of season products, and simultaneously to signal to consumers the arrival of a new collection. Price-discounting programs were normally implemented twice per year, at the mid and at the end of the year. The discounting depth was generally about 30%.

In relation to the respondents' perception of the Reebok brand and its sales promotional campaigns, Reebok was likely to be perceived as the brand that most commonly employed seasonal price-discounting programs. This perception was consistent with the perception of Super Sports respondent who said that 'Reebok was the most price discounted brand in the market'.

However, comments from other Reebok respondents were that every brand extensively discounted its products when new collections were launched, however, each utilized different approaches. Nike and Adidas quietly offered product discounts to consumers through specific channels such as factory outlets or their own showrooms without sending any promotional messages to consumers. On the other hand, Reebok implemented discount campaigns through normal channels such as department stores, and leading sports stores such as Super Sports with advertising support. This might increase the perception of Reebok as the brand most frequently discounted.

### **3.3.2 Findings of interviews**

In this section, key findings of in depth interviews are discussed. Potential antecedent factors that influence consumer responses to the seasonally discounted Reebok athletic footwear, and key response variables are clarified with justifications. Lastly, the influence of the factors identified on these consumer responses is discussed.

#### **Factors that influence consumer responses to the seasonally discounted Reebok athletic footwear**

Following the discussion of an overview of the athletic footwear products, respondents were given a list of all demographic, psychographic, and normative influencing factors suggested by the literature as influential in explaining consumer responses to sales promotions (chapter 2). These factors are summarized in Appendix 3.1. They were then asked to identify the factors that they believed would influence consumer responses to the seasonally discounted Reebok athletic footwear. Factors were categorized into demographics, psychographics and normative influencing factors. The relative importance of influential factors was also rated, and is presented in Table 3.6. In addition, key opinions of the respondents are summarized in Table 3.7 at the end of this section.

**Demographics.** **Income, age, and gender** were seen as most important. Regarding **income**, all respondents agreed that higher income consumers tended to respond less positively to the seasonally discounted Reebok athletic footwear, compared to lower income consumers. Two respondents added that higher income consumers tended to purchase athletic footwear they liked and did not take into consideration whether or not the chosen athletic footwear were discounted. Most respondents agreed that monthly family income should be investigated as an influencing factor.

**Age** was the second most important demographic factor. Half of the respondents linked age to income and employment, suggesting that as consumers got older they had to work for themselves. As a result, they were likely to increasingly forward plan their budget. Therefore, they might be more interested in the seasonally discounted Reebok athletic footwear. However, if their working status became increasingly firm, then perhaps they would be decreasingly interested in the seasonally discounted Reebok athletic footwear since they might be better able to manage their budget and simultaneously to generate



more income. An increase in consumer income would help consumers to relax their budget constraints. As a result, they would be able to buy higher priced products. Another comment by a Reebok respondent was that the older consumers became, the less they followed the trend of fashion. Thus, younger consumers may be less interested in the seasonally discounted Reebok athletic footwear because they perceived discounted athletic footwear as ‘out of fashion’ products.

**Table 3.6- Summary of respondent opinions of factors influencing consumer responses to the seasonally discounted Reebok athletic footwear**

Factors	Reebok Marketing Director	Reebok Marketing Manager	Reebok Product Manager	Super Sports Merchandising Manager	Total Score **
<b>Demographics</b>					
Income	4	4	4	3	15
Gender	4	3	3	3	13
Age	3*	3	3	3	12
Employment & managerial position	3	2	3	3	11
Family size	3	1	1	3	9
Marital status***	2	3	1	3	9
Presence of children	3	2	1	3	9
Education	0	3	0	2	5
Type of residence	0	0	0	0	0
Location of residence	0	0	0	0	0
<b>Psychographics</b>					
Brand loyalty	4	4	3	4	15
Quality consciousness	3	4	4	3	14
Need for cognition	3	3	4	4	14
Market mavenism	3	3	3	3	12
Value consciousness	3	3	3	2	11
Price consciousness	3	3	2	3	11
Deal proneness	3	3	2	3	11
Innovativeness***	3	2	3	3	11
Variety seeking	2	3	2	2	9
Store loyalty	0	1	0	1	2
Time pressure	0	0	1	1	2
Shopping plan	1	0	0	1	2
Shopping enjoyment	0	1	1	0	2
Identification	0	0	0	0	0
Impulsiveness	0	0	0	0	0
Perceived inventory space	0	0	0	0	0
<b>Normative influencing factors</b>					
Attitude of reference groups to the seasonally discounted Reebok athletic footwear	3	3	3	4	13
Motivation to conform to others' expectations	3	3	3	3	12

\* The relative importance score is from 0 for the unimportance, 1 for the less importance, 2 for importance, 3-4 for the most importance

\*\* Factor perceived as the most importance when its total score is 12-16, the importance when its total score is 8-11, the less importance when its total score is 4-7, and the unimportance when its total score is below 4.

\*\*\* This factor was not suggested by studies in the literature but was suggested by a respondent

Source: developed for this thesis

**Gender** was also a most important demographic factor. General comments were that female consumers were more likely to be prone to the seasonally discounted Reebok

athletic footwear than male consumers. It was felt that male consumers disliked the existence of crowds in sale events.

Other factors perceived as important included **employment, marital status, and family size** or **presence of children**. Most of respondents mentioned **employment** by linking this factor with consumers' self image. Half of the respondents suggested that the researcher would need to measure **a consumer's managerial position in the organization**. It was felt that consumers, who were managerial in level, would be unlikely to buy the seasonally discounted Reebok athletic footwear, as this would be likely to damage their self-image because others might look down on them for using the discounted athletic footwear. On the other hand, consumers who were on the level of operating staff would more likely to positively respond to the seasonally discounted Reebok athletic footwear because they would be less likely to care about their self-image.

Most respondents commented that **marital status, presence of children, and family size** were factors that would be likely to be closely related to each other. However, opinions somewhat differed in respect to these factors. **Marital status** was not suggested as an influential factor in the literature, but was suggested as important by the Super Sports respondent in the first session of the interviews. He mentioned that married people plan about their expenses and their revenues. They tend to be more careful than singles in product purchases and may be more interested in the seasonally discounted Reebok athletic footwear. In the second session of the interviews, other respondents were then asked to give opinions on this factor. Most mentioned that marital status may be related to consumer income and in this way might influence consumer responses to the seasonally discounted Reebok athletic footwear. The Reebok Marketing Director respondent supports the comments of the Super Sports respondent, suggesting that married people tended to start thinking of their wealth. They had to compare their expenses to their revenues, and would become more rational and simultaneously less emotional in purchasing products. They were more likely to think about what they could gain from a purchase, and therefore, they might be more prone to the seasonally discounted Reebok athletic footwear than a single. However, the other Reebok respondents had different opinions and suggested that married people had additional income from being a couple, which may mean that they could spend more,

and would be unlikely to pay attention to the low priced products. Thus, they would be less interested in the seasonally discounted Reebok athletic footwear.

Based on these opinions, marital status appeared to have a varying effect on the consumer response variables, depending on which psychographic factors were taken into account to explain the influence of this demographic variable. Married consumers might respond unfavorably to the seasonally discounted Reebok athletic footwear if they were not price conscious. On the other hand, they could respond positively to the seasonally discounted Reebok athletic footwear if they had value conscious characteristics. To create a clearer understanding about this demographic factor, additional hypotheses in relation to the relationships between marital status and these two psychographic characteristics will be developed and tested in this thesis. These hypotheses will further be discussed in section 3.4.2.

Regarding **children** and **family size factors**, half of the respondents agreed that the more children, or people, consumers had in their family, the more expenses they would have. In turn, the more they would likely to positively respond to the seasonally discounted Reebok athletic footwear. However, one Reebok respondent rated this factor as less important as he believed that it also depended on income. Nevertheless, a family with several children, and a high-income might result in unfavorable responses to the seasonally discounted Reebok athletic footwear only if their level of income allowed.

**Education** was viewed as least important. Two respondents commented that higher educated consumers were likely to have more knowledge and more information of products and promotions. They compared extensively between product features and price to pay and would be likely to purchase a brand only when it offered good value. They would not use price as the major cue for choosing a brand and thus might unfavorably respond to the seasonally discounted Reebok athletic footwear. By contrast, lower educated consumers would be more likely to use price as the major criteria for choosing a brand. They would be likely to react favorably to the seasonally discounted Reebok athletic footwear. The other two suggested that education was not influential since not only lower educated consumers, but also higher educated consumers were likely to be interested in price-discounted athletic footwear and came to a seasonal sale event.

For **type and location of residence**, all respondents viewed these factors as unimportant. They justified that although consumers might live in a small place such as an apartment or condominium, consumers did not use much space for keeping athletic footwear. Even for the athletic footwear brand extensively price discounted, consumers tended to buy only one or two pairs of athletic footwear at the most. All respondents viewed location as not an influential factor. One Reebok respondent said that ‘no matter where we seasonally discounted our products, a number of consumers always came’.

*Psychographics in relation to perceived utility.* From the list of all 16 psychographic factors, **brand loyalty, quality consciousness, market mavenism, and need for cognition** were perceived as the most important. All respondents perceived **brand loyalty** as a very important factor. Major respondents identified younger consumers, specifically teenagers, as consumers who may have a strong commitment to a particular athletic footwear brand. Brand loyal consumers would be less likely to positively respond to a brand they were loyal to if that brand was seasonally discounted, compared to less brand loyal consumers because brand loyal consumers disliked their brands to be extensively used by others. However, when asked about consumer responses to other brands they are disloyal to, most respondents suggested that consumers with a loyalty to a certain brand would be less likely to respond favorably to other seasonally discounted brands. The reason was that consumers have never been interested in other brands’ products and promotional activities. Less loyal consumers could buy any brand that offered the highest price discount.

Of secondary importance was **quality consciousness**. Key comments were that consumers using the price of a product as the key indicator for the product quality, would perceive the seasonally discounted Reebok athletic footwear as being a low quality product. Thus they tended to respond more negatively to the seasonally discounted Reebok athletic footwear than those who were less quality conscious. A Reebok respondent reasoned that it was the nature of athletic footwear products that those with higher quality would have a higher price. Higher technological athletic footwear models, such as Nike Air or Reebok DMS had a higher quality than those with a basic technology. Moreover, the products gave consumers more functional benefits. Thus they deserved to be priced higher.

**Market mavenism** was the third most important factor. Opinion varied considerably in respect to this factor. Two respondents suggested a positive relationship between market mavenism and consumer responses to the seasonally discounted Reebok athletic footwear. Market mavens would have a lot of relevant information not only of product benefits, but also of sales promotions of several brands. They knew that seasonally discounted Reebok athletic footwear did not have quality problems but instead the discounted Reebok athletic footwear were just out of season. They also could expect when the interested brand was to be discounted. They would wait and respond positively to the chosen discounted brand. However, a different comment was that because market mavens knew too much about the products and promotions, they may tend to be less excited and react less positively to the seasonally discounted Reebok athletic footwear than novices.

It appears that at least half of the respondents had a consistent opinion suggesting a positive relationship between market mavenism and consumer responses to the seasonally discounted Reebok athletic footwear. This information will be used for developing hypothesis regarding market mavenism in section 3.4.2.

**Need for cognition** was the fourth most important factor. Key comments were that the more consumers entered the decision making process, the more factors they would use for their decision, the more they would be fussy, and therefore would be less likely to be sensitive to the seasonally discounted Reebok athletic footwear.

Other factors perceived by respondents as important included **value consciousness, price consciousness, variety seeking, deal proneness, and innovativeness**. For **value consciousness**, key responses from most respondents were that specific target consumers, such as older consumers, became more rational than younger consumers, and were more likely to trade off between benefits received and the price to pay for a purchase of athletic footwear in their evoked set. Value conscious consumers would select a brand when they were satisfied with values gained from a purchase. A seasonal price-discounting program of Reebok athletic footwear reminded value conscious consumers that they were receiving additional values from buying the discounted Reebok athletic footwear, and this value conscious perception might, in turn, stimulate them to respond positively to the seasonally discounted Reebok athletic footwear.

Another comment was that value conscious consumers believed that seasonally discounted Reebok athletic footwear were just only out of season products. They were less likely to follow a trend of fashion, therefore responding favorably to the seasonally discounted Reebok athletic footwear.

The second important factor was that of **price consciousness**. Most respondents suggested that low-income consumers were also one of those groups and were likely to be very price conscious. They focused on the lowest priced brand due to their limited income. Therefore, the more they were price conscious, the more they would choose the seasonally discounted Reebok athletic footwear.

**Variety seeking** was the third important factor. A common comment was that consumers who looked more for a variety were likely to respond more favorably to the seasonally discounted Reebok athletic footwear if Reebok athletic footwear was in their consideration set. A respondent said that ‘it should be great for consumers because they could pay less but still could get one of the preferred products’.

The fourth important psychographic factor was that of **deal proneness**. Most respondents perceived this factor as important justifying that consumers were more likely to be deal prone due to the economic crisis. A Reebok respondent explained that seasonal price-discounting programs have been tremendously used not only in the athletic footwear market but also across all industries. This situation rapidly led consumers to evaluate the value of their purchases simply on whether or not they received a discount. A general conclusion was that deal prone consumers were likely to evaluate Reebok athletic footwear (un)favorably if a seasonal- price discount was (not) offered.

**Innovativeness** was also perceived as an important psychographic factor. Innovativeness was not suggested as an influential factor by research in the literature. However, the first Reebok respondent (Marketing Director) addressed this factor as influential. He suggested that the researcher would need to measure the degree to which consumers are interested in new athletic footwear models. All respondents were then asked to give opinions on this factor. Two Reebok respondents suggested that younger consumers, specifically teenagers, were more likely to be innovative and that this was

one reason why athletic footwear brands constantly kept developing new technologies and new models. A general comment was that innovative consumers were likely to respond negatively to the seasonally discounted Reebok athletic footwear because they perceived discounted athletic footwear as out of date and non-innovative products. It appears that most respondents agreed that innovativeness should refer to ‘the degree to which consumers are interested in new athletic footwear models’, rather than the athletic footwear with new technologies or a new athletic footwear brand. A key reason for this definition is that there would not be athletic footwear with a new technology or a new athletic footwear brand to be launched during this research period.

Finally, psychographic factors considered to be less important included **store loyalty, identification, time pressure, impulsiveness, perceived inventory space, shopping enjoyment, and shopping plan**. In relation to **store loyalty**, key comments were that consumers were less likely to be loyal to a specific store these days. In addition, most of the athletic footwear stores have implemented the same discounting programs. Therefore, store loyalty has become an unimportant factor and would not significantly influence consumer responses to athletic footwear products promoted through sales promotions.

For **identification**, all respondents identified this factor as irrelevant and unimportant because this factor was more likely to be related to service business than athletic footwear products. Regarding **time pressure factor**, key comments were that the athletic footwear was not an easily and frequently purchased product. No matter how busy consumers were, they would not select and buy a specific brand or an athletic footwear model rapidly. To a certain degree consumers would go through the decision making process. However, a respondent commented that busy consumers were likely to have high income and be brand loyal. So they would react to the seasonally discounted Reebok athletic footwear similarly as did these two groups of consumers.

Common comments in respect to **impulsiveness** were that an immediate purchase rarely existed because consumers generally took some time for searching product information, evaluating alternative brands and athletic footwear models based on functional and emotional benefits expected to be gained, and then they would make a decision. **Perceived inventory space** was also irrelevant because consumers did not require a lot

of space for stocking the purchased athletic footwear. Thus, consumers should not consider this issue.

Regarding **shopping enjoyment**, key comments were that some consumers might enjoy shopping, and thus be more exposed to discounting programs of Reebok athletic footwear. However, consumers were less likely to come to a sale event to look for enjoyment. Instead, they came because they wanted to buy their chosen athletic footwear at a lower price. In relation to **shopping plans**, a general comment was that making a shopping list was not a relevant purchasing behavior for this product type. A respondent said that ‘it was unlike the grocery products that we had to make a list prior to an actual purchase to remind consumers about items needed to be bought’.

*Normative influencing factors.* These factors consisted of two sub-factors, namely: **motivation to conform to the expectations of reference groups**, and; **attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**. **Motivation to conform to the expectations of reference groups** was considered as one of the most important factors. A key comment was that athletic footwear was a product that could reflect consumers’ self image. Consumers who had this personality would take into account opinions of their reference groups. How they responded to the seasonally discounted Reebok athletic footwear might depend on the attitudes of their reference groups to the discounted Reebok athletic footwear. Two respondents further suggested that younger consumers were likely to be very much concerned about the opinions of their friends and their self-image. They were likely to look down on people buying cheap products. Therefore, they were more likely than those who were less concerned with their self-image to respond negatively to the seasonally discounted Reebok athletic footwear as they believed that their self-image could be damaged by using seasonally discounted athletic footwear brands or products.

Similarly, **attitude of reference groups towards the seasonally discounted Reebok athletic footwear** was seen to be one of the most important factors. Key comments were that how consumers responded to the seasonally discounted Reebok athletic footwear depended on their reference groups. Consumers would react to the seasonally discounted Reebok athletic footwear in a similar manner as their reference groups if they depended very much on opinions of their reference groups. A respondent suggested that younger



consumers strongly depended on their friends. In conjunction with the brand loyal or innovative personality, they would respond unfavorably to the seasonally discounted Reebok athletic footwear.

**Behavioral responses.** For this issue, respondents were asked to identify key behavioral response variables (excluding consumers' actual purchase behaviors), in particular **purchase intentions, attitudes, and utility perceptions**. In all cases, respondents identified **utility perceptions** and **purchase intentions** as the key behavioral responses. A common comment from most respondents was that prior to making a purchase decision, consumers were exposed to specific information relating to brands, their products, and promotions. They tended to develop their perceptions towards the seasonally discounted Reebok athletic footwear. In turn, consumer perceptions towards the seasonally discounted Reebok athletic footwear would affect the degree to which they intended to purchase these discounted Reebok athletic footwear.

Most respondents suggested consumer **attitudes** to the seasonally discounted Reebok athletic footwear would be less important. A respondent justified that consumer attitudes might be viewed as a part of consumer perceptions. They were closely related to each other. Another justification from a Reebok respondent was that when measuring the effectiveness of a consumer-oriented sales promotion, we focused on consumer perceptions, purchase intentions, or purchase behaviors of consumers, rather than consumer attitudes.

**The influences of consumer characteristics on consumer responses to the seasonally discounted Reebok athletic footwear.** Respondents were presented with two different frameworks of the influence of consumer characteristics on consumer responses to the seasonally discounted Reebok athletic footwear. The first framework identified all factors as being direct influencers. The second framework presented psychographics and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear as direct influencers whereas demographic factors were indirect influencers (see the Appendix 3.3 for the details). All respondents supported the second framework. Common justification was that when demographics changed, psychographics would also change. In turn, changes in psychographics would influence consumer responses to the seasonally discounted Reebok athletic footwear.

**Trend of price discounting promotions.** All respondents suggested that price discounting programs would continue to exist due to the nature of the companies' strategy of new product development. End of season product inventories needed to be reduced. However, the Super Sports respondent suggested further that athletic footwear companies should not use this promotional technique frequently. It should be used in conjunction with other non-priced promotional strategies to maintain the brand image.

**Table 3.7- Summary of opinions of respondents**

Factors (Overall perception)	Reebok Marketing Director	Reebok Marketing Manager	Reebok Product Manager	Super Sports merchandise manager
<b>Demographics</b>				
Age (Most important)	Compared to younger consumers, particularly, teenagers, older consumers are less likely to follow a trend of fashion. They can wait for sale events and buy more seasonally discounted Reebok athletic footwear. Younger consumers may not buy the discounted Reebok products because they believe that discounted athletic footwear are out of fashion.	The older people get, the more they have to work for themselves. The more constraint they have on budget. The more they buy the seasonally discounted Reebok athletic footwear.	Younger consumers are less likely to have a rational purchase decision. They think that the seasonally discounted Reebok athletic footwear is low image.	Consumers who just start their jobs might purchase the seasonally discounted Reebok athletic footwear because their incomes are still limited. When getting older, they have more income, their working status become firm. They might be less interested in discounted athletic footwear.
Gender (Most important)	Women are more prone to and shop more discounted athletic footwear than men.	Female consumers are more likely to purchase the seasonally discounted Reebok athletic footwear than the male.	Male consumers are less likely to buy the seasonally discounted Reebok athletic footwear than female consumers	Men do not like crowds in the sale events. They are less likely to enter the sale events of Reebok products
Income (Most important)	Lower income consumers have to be more serious about their expenses than the richer. Then they tend to be more interested in the seasonally discounted Reebok athletic footwear.	Lower income consumers have a limited budget. They will wait until Reebok products are discounted. Then they buy the interested model. Higher income consumers will not care and will not wait for the discounting.	Rich people can afford buying a regular priced shoe. They are less likely to look for a discount from Reebok products.	Higher income consumers purchase a brand they like and may not take into consideration whether or not the chosen brand is discounted.
Employment (Important)	Compared to consumers who work at a passive company where image is not important, consumers working at the company where self-image is very much focused will less likely to like the seasonally discounted Reebok athletic footwear.	Employment and its influence should be related to that of income.	White-collar employees are more concerned about their image and will be less likely to get into sale events, compared to blue-collar employees. They tend to believe that others may lookdown them when using discounting athletic footwear.	Consumers who are at managerial level will not buy the seasonally discounted Reebok athletic footwear because they perceive a purchase with a discount offered as being a low image.
Family size, and presence of kids (Important)	Consumers with many children are more likely to purchase the seasonally discounted Reebok athletic footwear than singles because they have to be more concerned about their incomes and expenses.	Consumer with fewer children will have fewer constraints on their budget than those with more children. They are less likely to buy the seasonally discounted Reebok athletic footwear than those with many children. However, this factor is not that influential.	The more people consumers have in their family, the more they are rational in purchasing products. They tend to buy more discounted products. However, it very much depends on their income. High-income consumers may not have any problems from their family size. They are less likely to look at the discounted Reebok athletic footwear.	People with a larger family size will have a lot more items to buy. They tend to be more prone to the seasonally discounted Reebok athletic footwear than those with a smaller family size.
Marital status (Important) This factor was not suggested by studies in the literature, but was suggested by Super sports respondent)	Compared to single consumers, married consumers will be more rational and less emotional in purchasing products. They were more likely to think about what they could gain from a purchase. They tend to buy more the seasonnaly discounted Reebok athletic footwear.	Married people had additional income from being couple. They could spend more and would be unlikely to pay attention to the low priced products. They would be less interested in the seasonally discounted Reebok athletic footwear.	Family income plays a key role here. If they have a lot of money, they do not have to be interested in the seasonally discounted Reebok athletic footwear.	Married people plan about their future. It depends on their expenses and their revenues. They tend to be more careful than singles in product purchases and may be more interested in the seasonally discounted Reebok athletic footwear.

**Table 3.7- continued**

<b>Factors (Overall perception)</b>	<b>Reebok Marketing Director</b>	<b>Reebok Marketing Manager</b>	<b>Reebok Product Manager</b>	<b>Super Sports merchandise manager</b>
Education (Less important)	It does not depend on education at all. I have found a lot of consumers purchasing price-discounted athletic footwear. A number of them are highly educated while many of them are not.	Higher educated consumers will have more information of products and promotions. They compare products and promotions across brands and shoe models. Price-discounting programs might not stimulate their purchases easily.	Education should not be influential. You cannot expect that people with high education will not buy or buy the seasonally discounted Reebok athletic footwear. Also it is the same for lower educated consumers. Other factors should be more influential.	Higher educated consumers will not focus only on price to pay but use some other cues for making their decisions whether they want to buy the seasonally discounted Reebok athletic footwear. While lower educated consumers focus on price to pay as the major cue for a purchase decision. Thus they will respond more positively to the seasonally discounted Reebok products.
Type of residence (Not important)	Consumers will not buy several pairs of athletic footwear even if products are extensively discounted. They should not use a lot of space for keeping the purchased product. Consumer responses to discounted athletic footwear should not be related to type of residence.	'I do not think this factor is an important one. Type of residence or space for keeping the purchased athletic footwear is not an issue here. It is unlike grocery products that when they are discounted, consumers will buy a lot more of products'.	Type of residence is not influential. It is not a major factor that consumers have to be concerned when buying or not buying a pair of the discounted athletic footwear.	People buy no more than two pairs of athletic footwear at a time from a seasonal sale event. So the type of house they stay should not be related to consumer's buying behavior.
Location of residence (Not important)	'It is not an important factor. We have run many seasonal sale events at many stores. What we have found is that the discounted Reebok products have been sold out very well'.	'It is not an important factor because no matter where we seasonally discount our products, a number of consumers always come'.	'It does not depend on where you live at all. People who live in downtown or far from town can go to any stores. It depends on whether or not they want to buy the seasonally discounted Reebok athletic footwear'.	'Not influential factor. People can find place to buy the seasonally discounted Reebok athletic footwear easily regardless where they live'.
<b>Psychographics</b>				
Price consciousness (Important)	Certain groups of consumers look for a low priced product. The more they want to buy a low priced brand, the more they pay for the seasonally discounted Reebok athletic footwear.	Low-income consumers tend to have this personality. They prefer the discounted brand to a regular priced one.	Due to the economic crisis, consumers tend to be more price conscious. They tend to increasingly positively respond to the seasonally discounted athletic footwear brand	It is one of the reasons why we have a wide range of footwear and prices for many target groups. People with lower income tend to be more interested in the seasonally discounted Reebok athletic footwear due to their limited income.
Value consciousness (Important)	Older consumers or rational consumers tend to trade off between benefits received and the price to pay from a purchase of brands in their evoked set. Value conscious consumers may select a brand when they are satisfied with values gained from a purchase. A price-discounting program of Reebok athletic footwear reminds value conscious consumers that they are receiving additional values from a purchase of these Reebok products. This may stimulate them to positively respond to the seasonally discounted Reebok athletic footwear.	Older consumers who rationally purchase a product tend to be value conscious. They will trade off between a price to pay and what they gain from a purchase and will choose the seasonally discounted Reebok athletic footwear rather than the regular priced one.	Female consumers are more likely than male to be value conscious. They compare products and prices more and tend to perceive the seasonally discounted Reebok athletic footwear as the normal quality product. They think they gain more benefits from buying a discounted brand.	Value conscious consumers believe that seasonally discounted Reebok athletic footwear is just only out of season products. They are less likely to follow a trend of fashion. They may favorably respond to these discounted Reebok products. Adults are more likely than teenagers to be value conscious.

**Table 3.7- continued**

Factors (Overall perception)	Reebok Marketing Director	Reebok Marketing Manager	Reebok Product Manager	Super Sports merchandise manager
Quality consciousness (Most important)	Higher technological shoe models, such as Nike Air or Reebok DMS have a higher quality than those with a basic technology. The products give consumers more functional benefits. Thus they deserve to be priced higher. Quality conscious consumers will not choose the seasonally discounted Reebok athletic footwear because they feel that it is a very low quality product.	People who care about their health will use product quality as the key criteria for brand evaluation. They believe that good quality products should be high priced. They negatively evaluate the seasonally discounted Reebok athletic footwear because they perceive that discounted brands are selling low quality products.	Quality conscious consumers tend to be sport players. They know a lot of functional benefits of products. They perceive that brand with higher technology should have higher price than those with lower tech brand. They will not like low priced or seasonally discounted Reebok athletic footwear.	Quality conscious consumers will use a price of a brand as a key indicator of product quality. They will not be interested in the seasonally discounted Reebok athletic footwear.
Market mavenism (Most Important)	Experts will have a lot of relevant information for making their purchase decisions. They will wait until they can gain the best buy. They will positively react to the seasonally discounted Reebok athletic footwear.	Novice will not have a lot of necessary information. They will make a purchase decision based on a few criteria. They may not know that the quality of discounted products is still good. They will not purchase the seasonally discounted Reebok athletic footwear.	The more consumers become an expert, the more they will be able to expect when a promotion come. They will wait to buy the seasonally discounted Reebok athletic footwear if it is their favorite brand.	Experts know too much about the products and promotions, they tend to be less excited and less positively react to the seasonally discounted Reebok athletic footwear.
Brand loyalty (Most important)	Younger consumers (in particular, teenagers) can be loyal to a particular brand and will not like the others extensively using products of their favorite brands. They will not like their favorite brand to be discounted. When other brands are discounted, they would not favorably respond to those brands because they are not interested in other brands' promotional activities.	Brand switchers will love to buy the seasonally discounted Reebok athletic footwear because they can get products with a lower price. Brand loyal consumers do not want their favorite brand to be used by others. They dislike their brand to be discounted.	Teenagers and sports players may be brand loyal consumers. They may commit to a particular brand. Brand loyal consumers will not want their favorite brand to offer a large price off. They will be upset. They do not care about other brands' promotional activities.  Brand less loyal consumers like discounting programs. They will switch to another discounted brand if those two brands have similar product functional benefits.	It is obvious that brand loyal consumers of Nike are younger consumers, in particular teenagers. They follow a trend of fashion. I do not think they will like their favorite brand to be discounted because they do not want their favorite brand to look cheap. They will not be interested in other brands no matters how much those brands are discounted.
Store loyalty (Not important)	'It might be an important factor in the past when leading stores had not tremendously implemented discounting campaigns. But now, I don't think this factor is an influential because most of the stores have used similar discounting programs'.	Consumers are less likely to be loyal to a specific athletic footwear store during these days because they can switch to several stores within or across the department stores easily. In addition, these stores carry almost the same product categories.	It is not an important factor. Other factors as previously discussed, should play more important role in influencing consumers to buy or not to buy the seasonally discounted Reebok athletic footwear.	'I think we have a lot of consumers who are loyal to Super Sports because we carry a lot more product items than competitors. However, It is quite different from what we talked about the brand loyalty factor. I do not see a big difference between store loyal and less store loyal consumers in their responses to the discounting programs of alternative stores'.

**Table 3.7- continued**

<b>Factors (Overall perception)</b>	<b>Reebok Marketing Director</b>	<b>Reebok Marketing Manager</b>	<b>Reebok Product Manager</b>	<b>Super Sports merchandise manager</b>
Identification (Not important)	'It is not relevant to athletic footwear products. If we are talking about the company, I do not think this is not relevant to this topic because consumers are likely to attend to an athletic footwear brand, rather than the company who market that brand'.	This factor is not influential. It should be more related to the service typed products.	This factor is not relevant to the product context and if it is, this factor is similar to brand loyalty.	This factor is not relevant to athletic footwear. It is not an influential.
Variety seeking (Important)	It depends on whether or not the seasonally discounted Reebok athletic footwear is also one of their favorites. If it is, then consumers who seek variety will more positively respond to the discounted Reebok products than those who are less variety seeking.	Variety seeking consumers will like the seasonally discounted Reebok athletic footwear because they can keep variety and paying a lower priced product. 'It should be great for them because they could pay less but still could get one of the preferred products'.	Similar as the market maven, variety seeking consumers tend to have a lot of information. They can wait and buy the seasonally discounted Reebok athletic footwear if they like it.	Variety seeking consumers have more than one brand in their mind. If one of those brands is discounted, they will buy it.
Time pressure (Not important)	'I do not think it is influential. No matters how consumers are busy. They have to find out some essential relevant information for making purchase decision. It rather depends on other factors'.	'It is not a grocery product. People have to have some relevant information for making purchase decisions'. Consumer responses to the seasonally discounted Reebok athletic footwear will not depend on the degree to which consumers are busy.	Busy consumers have high income and brand loyal. So they would react to the seasonally discounted Reebok athletic footwear similarly as those two groups of consumers.	Consumers who have a lot of time can find or wait for products to be discounted while busy consumers will buy products without any concern of price-discounting programs.
Shopping plan (Not important)	Consumers who plan their purchase in advance tend to favorably respond to price-discounted brand. But this factor is not much influential because consumers may not make a shopping list for buying a pair of athletic footwear.	'It is not like the grocery products that we may make a list prior to an actual purchase'.	Making a shopping list is not a purchase behavior for this product type.	Consumers who plan for their purchase will know more about the sale events and may wait until they can buy a shoe with lower price. However, this factor is not much influential.
Shopping enjoyment (Not important)	Some people may enjoy shopping discounted products but it is not an important factor that could significantly influence consumers to purchase the seasonally discounted Reebok athletic footwear.	Sale events may not be exciting. People will come to see a number of discounted athletic footwear instead, not an enjoyment.	This factor may have an effect on consumer responses to the seasonally discounted Reebok athletic footwear to some degree. Some consumers may enjoy shopping, and be more exposed to discounting programs. However, it does not strongly effect how they buy or not buy the seasonally discounted Reebok athletic footwear.	It is not an important factor. Buying the seasonally discounted Reebok athletic footwear does not create enjoyment to consumer s that much.
Impulsiveness (Not important)	It is not a product that consumers can immediately buy without any search or product comparison.	There are both functional and emotional features that consumers will find out from alternative brands. Consumers cannot see and choose a brand immediately.	'No way you can buy athletic footwear products without an attempt to make brand or product comparisons'.	'You are supposed to have relevant information in advance before buying a athletic footwear brand'.

**Table 3.7- continued**

<b>Factors (Overall perception)</b>	<b>Reebok Marketing Director</b>	<b>Reebok Marketing Manager</b>	<b>Reebok Product Manager</b>	<b>Super Sports merchandise manager</b>
Perceived inventory space (Not important)	It is not an issue here. Consumers will not take a lot of space for keeping athletic footwear.	Consumers will not take this issue seriously in deciding to buy or not to buy the seasonally discounted Reebok athletic footwear.	Consumers do not think of this issue when they respond to the seasonally discounted Reebok athletic footwear.	It is not an influential factor.
Need for cognition (Most important)	The more consumers know a lot of products and promotions, The more they make a comparison, and finally they are less likely to be stimulated by seasonal discounting programs of Reebok products.	The more consumers enter decision making process, the more they are fussy, the less they will favorably react to the seasonally discounted Reebok athletic footwear.	Consumers with lower need for cognition will not use a lot of essential information as the criteria for choosing a brand. They find the seasonally discounted Reebok athletic footwear interesting and then buy it.	A lot of consumers extensively ask a lot more for information of discounted brands, spend a lot more time for making a decision, and finally just walk away. Consumers with lower need for cognition are easier to make a purchase decision and buy the seasonally discounted Reebok athletic footwear.
Deal proneness (Important)	Price-discounting programs have been tremendously used not only in the athletic footwear market but also across all industries. Consumers get use to it and automatically look for a discount. They will positively react to the seasonally discounted Reebok athletic footwear.	Products without any discounts tend to be decreasingly purchased. Consumers tend to increasingly look for a sale sign first. If they do not find it, they will not get into the product corner.	Deal prone consumers tend to evaluate the value gained from a purchase by seeing whether or not a purchase is supported by a discount. They will positively respond to the seasonally discounted Reebok athletic footwear.	This personality becomes an influential during the economic crisis. Consumers tend to be more aware of their spending. If they do not get a discount, they just simply postpone their purchases.
Innovativeness (Important) This factor was not suggested by studies in the literature, but was suggested by Reebok Marketing Director)	Innovativeness may be an influential factor because some groups of consumers prefer new shoe models to current ones. Younger consumers (particularly teenagers) love new shoe models. They perceive the seasonally discounted Reebok athletic footwear as a non-innovativeness and simply ignore it.	Younger consumers (teenagers) are very innovative. That is why we have to develop a new technology or launch new models all the times. These consumers will not buy the seasonally discounted Reebok athletic footwear because they think it is an out of date product.	Innovative consumers always look for a new thing. They will not be interested in discounted brands. Higher educated consumers are more likely than the lower educated to be more innovative because they tend to attend more to information of new products or collections.	Older consumers will be less innovative. They are less likely to find out about the new athletic footwear models. Instead, they will search more for discounted products.
<b>Normative influencing factors</b>				
Motivation to conform to others' expectation (Most important)	Younger consumers (teenagers in particular) tend to focus on their self-image. They are less likely to purchase the seasonally discounted Reebok athletic footwear as they think that discounted brands will damage their self-image.	Athletic footwear is one of the products that reflect a buyer' image. Some consumers, i.e. teenagers, will not be interested in the seasonally discounted Reebok athletic footwear because they are afraid of being looked down by others.	Some groups of consumers, such as adults or older people, make a decision by themselves. They are less likely to be interested in others' looks. Whether they like the seasonally discounted Reebok athletic footwear depend on other factors.	Younger consumers, such as teenagers, tend to have this trait, and will be very much concerned of opinions of their reference groups. How they respond to the seasonally discounted Reebok athletic footwear may depend on the attitude of their reference groups to the discounted Reebok products.
Attitudes of reference groups towards promoted products (Most important)	Reference groups could have an influence on consumer behaviors when consumers want to be a part of the group. They will react accordingly to reference groups' behaviors.	Teenagers very much depend on their friends. In conjunction with the brand loyal or innovative personality, they will negatively respond to the seasonally discounted Reebok athletic footwear.	Consistent with the motivation to conform to others' expectation, consumers who are not sensitive to others' expectation will not be influenced by their reference groups. How they respond to the discounted Reebok products will depend on other factors.	Similar opinion as for motivation to conform to others' expectation.

**Table 3.7- continued**

<b>Factors (Overall perception)</b>	<b>Reebok Marketing Director</b>	<b>Reebok Marketing Manager</b>	<b>Reebok Product Manager</b>	<b>Super Sports merchandise manager</b>
<b>Key behavioral responsive variables to be investigated</b>	<p>Utility perceptions and purchase intentions are key consumer responses to the seasonally discounted Reebok athletic footwear. When measuring the effectiveness of sales promotions, we tend to focus more on consumer perceptions, purchase intentions, and actual purchases, not the attitudes.</p> <p>The relative importance: utility perceptions are more important than consumer intentions.</p>	<p>Utility perceptions and purchase intentions are key consumer responses to the seasonally discounted Reebok athletic footwear. Perception and attitude tend to be closely related to each other.</p> <p>The relative importance: purchase intentions are as important as utility perceptions.</p>	<p>Utility perceptions, purchase intentions, and attitudes are key consumer responses to the seasonally discounted Reebok athletic footwear. ‘When putting them in order of importance, perceptions come first, purchase intentions are the second, and followed by attitude’.</p>	<p>Utility perceptions and purchase intentions are key consumer responses to the seasonally discounted Reebok athletic footwear. I think that consumer attitudes should be related to the corporate ads.</p> <p>The relative importance: purchase intentions are as important as utility perceptions.</p>
<b>Influence of factors on consumer responses to price-discounted athletic footwear products (see Appendix 3.2 for the details of frameworks)</b>	Support the framework 2.	Support the framework 2.	Support the framework 2.	Support the framework 2.

Source: developed for this thesis



### **3.4 Key influential consumer characteristics and hypotheses to be tested in the survey research**

The previous section identified consumer characteristics expected to have an influence on consumer responses to the seasonally discounted Reebok athletic footwear and key response variables relevant to this research. This information is enhanced with relevant information from the literature (section 2.4) in order to select the most relevant and significant influential consumer characteristics and the key response variables that will be investigated in the survey research. This section consists of two parts. Selected consumer characteristics and key response variables are summarized in section 3.4.1. Then all relevant hypotheses to be tested in the survey research are summarized in section 3.4.2.

#### **3.4.1 Consumer characteristics and the key response variables to be included in the survey research.**

In relation to the *influential consumer characteristics*, a number of consumer characteristics found to have an influence on consumer responses to sales promotions was identified in the literature (section 2.4). These factors were further explored in the exploratory research in order to identify factors most relevant to the athletic footwear context and the Thai market.

Factors to be investigated in the survey research are summarized in Table 3.8. The first column of this table highlights influential antecedent factors identified in the literature and/or the exploratory research. The second column addresses the degree to which each factor is consistently supported as influential by previous studies in the literature. Following this, the third column addresses the degree to which each factor was strongly supported as influential in the exploratory research. The last column addresses factors finally to be researched.

In general, the findings of exploratory research were consistent with the literature, supporting those factors proposed to be relevant and important, and excluding those factors that have previously been proposed for the elimination in the literature (section 2.4), namely: location of residence; store loyalty; and identification. Therefore, these factors will now be eliminated from this research.

**Table 3.8- Summary of antecedent influential factors to be examined in the survey research**

Empirical studies	The degree to which this factors is consistently suggested as influential across studies (S,M,W,N) 1 *	Strength of support of the importance of this factor from exploratory research (S,M,W,N)**	Included in the survey research
<b>Antecedent factors</b>			
<b>Demographics</b>			
Age	M	S	Yes
Gender	S	S	Yes
Income	S	S	Yes
Employment	W	M	Yes
Managerial position***	N	M	Yes
Family size	M	M	Yes
Marital status***	N	M	Yes
Presence of children	S	M	Yes
Education	S	W	Yes
Type of residence	W	N	No
Location of residence	W	N	No
<b>Psychographics</b>			
Price consciousness	S	M	Yes
Value consciousness	W	M	Yes
Quality consciousness	W	S	Yes
Market mavenism	M	S	Yes
Brand loyalty	S	S	Yes
Store loyalty	M	N	No
Identification	W	N	No
Variety seeking	M	M	Yes
Time pressure	W	N	No
Shopping plan	W	N	No
Shopping enjoyment	W	N	No
Impulsiveness	W	N	No
Need for cognition	W	S	Yes
Deal proneness	S	M	Yes
Innovativeness***	N	M	Yes
Perceived inventory space	W	N	No

**Table 3.8- continued**

Empirical studies	The degree to which this factors is consistently suggested as influential across studies (S,M,W,N) 1 *	Strength of support of the importance of this factor from exploratory research (S,M,W,N)**	Included in the survey research
Reference groups			
Motivation to conform to the expectations of reference groups	W	S	Yes
Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear	W	S	Yes

1 Source: from Table 2.7.

\* S= strong (when that variable is consistently suggested as influential by at least three empirical studies)

M= moderate (when that variable is consistently suggested as influential by two empirical studies)

W= weak (when that variable is consistently suggested as influential by an empirical study)

N= none (when that variable is not suggested as influential by any studies)

\*\* S= strong (when that variable is suggested as a most important factor by the exploratory research)

M= moderate (when that variable is suggested as an important factor by the exploratory research)

W= weak (when that variable is suggested as a less important factor by the exploratory research)

N= none (when that variable is suggested as an unimportant factor by the exploratory research)

\*\*\* Factors not identified in the literature, but newly identified by the exploratory research

Source: developed for this thesis

The exploratory research has additionally indicated that **time pressure, impulsiveness shopping enjoyment, shopping plan, type of residence;** and **perceived inventory space** may also be irrelevant, and strongly supported the exclusion of these factors. This research has justified that these factors have been shown to only be related with grocery product context, rather than the athletic footwear context. In relation to **time pressure**, and **impulsiveness**, athletic footwear was not an easily and frequently purchased product. Athletic footwear consumers generally took some time searching for product information, evaluating alternative brands and shoe models based on functional and emotional benefits expected to be gained, prior to making a decision. They were less likely to choose a specific pair of athletic footwear on impulse or because they did not have time.

In respect to **shopping enjoyment**, athletic footwear consumers were less likely to come to a sale event for enjoyment. Instead, they came to buy their chosen athletic footwear with a lower price. Therefore, shopping enjoyment tends not to be significantly related to the athletic footwear context.

In relation to **shopping plan**, this variable might be related to grocery products because consumers might have to make decisions on grocery items to buy and/or quantities of each item to be purchased prior to an actual purchase of these products. Therefore, they might have made a shopping list or plan their shopping in advance. However, when buying athletic footwear, consumers are unlikely to make that purchase decision. Therefore, shopping plan is unlikely to be related to the context of athletic footwear.

Regarding **perceived inventory space** and **type of residence**, athletic footwear consumers would not think about the storage space when buying discounted athletic footwear because athletic footwear are unlikely to be a 'stock up' item, and athletic footwear consumers tend not to substantially increase the purchase quantity of the discounted athletic footwear.

With these justifications, it has been decided that **time pressure, impulsiveness, shopping enjoyment, shopping plan, type of residence, and perceived inventory space** would be unlikely to be related to the athletic footwear context. These variables will therefore be eliminated from this research.

The exploratory research has not only assisted the researcher to eliminate particular consumer characteristics, it has also helped to identify other key factors that have not been previously discussed in the literature. These factors were **innovativeness, marital status**, and a demographic characteristic in relation to employment status, namely: **managerial position in the organization**. These are briefly discussed in turn.

The exploratory research has suggested **innovativeness** as essential in explaining consumer responses to the seasonally discounted Reebok athletic footwear because athletic footwear were seasonal products and most of the athletic footwear brands have launched their new models seasonally. It was hypothesized that there are groups of innovative consumers who keep searching for these new athletic footwear. In relation to **marital status**, respondents from the exploratory research justified that married consumers would respond negatively (positively) to the seasonally discounted Reebok athletic footwear if they had price conscious (value conscious) characteristics. In addition, the **managerial position in the organization** has been suggested to be related with the consumers' self image, and motivation to conform to expectations of reference

groups. Additional hypotheses will be developed to test the relationships of these newly identified factors in order to clarify the role these factors play in explaining consumer intentions to purchase the seasonally discounted Reebok athletic footwear,. These hypotheses will be discussed in section 3.4.2.

As a result, **demographic factors** to be investigated in the survey research include age, gender, income, employment, managerial position in the organization, family size, presence of children, marital status, and education. Since family size and presence of children measure similar consumer characteristics, it was decided to combine these two variables together, and term this variable as family size. Finally, there are **eight demographic factors** to be investigated in the survey research. They are **age, gender, income, employment, managerial position in the organization, family size, marital status, and education.**

**Nine psychographic factors** to be researched include **price consciousness, value consciousness, quality consciousness, market mavenism, brand loyalty, variety seeking, need for cognition, deal proneness, and innovativeness.** **Two normative influencing factors** include **motivation to conform to the expectations of reference groups, and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear.**

In relation to the **key response variables**, the literature has justified the appropriateness of the inclusion of the **purchase intentions** as the single key response variable in this survey research. This justification is consistent to the findings of the exploratory research supporting the investigation of the relationships between consumer characteristics and the two key response variables, namely: utility perceptions, and purchase intentions. As utility perceptions were to be measured under the psychographic characteristics in relation to the utility theory (Thaler 1985) as previously discussed in the literature (section 2.4), therefore, purchase intentions was deemed most appropriate to be examined as the single key response variable for this research.

### **3.4.2 Hypothesis to be tested in the survey research**

All consumer characteristics expected to have a relationship with consumer intentions to purchase the seasonally discounted Reebok athletic footwear were identified in the

previous section. This section summarizes all hypotheses to be tested in the survey research.

Preliminary hypotheses proposed in the literature (section 2.4) will remain for the test in the survey research, excepting those in relation to **time pressure, impulsiveness, shopping enjoyment, shopping plan, type of residence, and perceived inventory space** because these factors were suggested for elimination, as discussed in the previous section. From Table 2.8, these excluded hypotheses are Hypotheses 8a, 8b, 9, 10a, 10b, 11, 12, 13e, 13f, 13k, 13l, and 13m.

The exploratory research was adopted not only to identify relevant influential factors but also to clarify the hypotheses of particular variables that have been proposed based on limited evidence in the literature. These hypotheses include those justifying the relationship between **age** and the variable of '**motivation to conform**', and the relationship between **market (price) mavenism** and the **purchase intentions**.

In respect to the hypothesis proposing the negative relationship between **age** and '**motivation to conform**' (Hypothesis 7b from Table 2.8), the exploratory research has supported this proposition, justifying that younger consumers were more likely than older consumers to develop a distinct identity. They needed to gain more acceptance from their peers. Therefore, this hypothesis remained for the testing in the survey research.

Although the exploratory research has not strongly supported the hypothesis positing the positive relationship between **market (price) mavenism** and the **purchase intention** variable (Hypothesis 13d from Table 2.8), it appears that at least half of the respondents supported this hypothesis. They justified that market mavens would have a lot of product and promotional information. Based on this information, mavens should be interested in buying the seasonally discounted Reebok athletic footwear due to the acceptable perceived quality of the discounted products, and the acceptable perceived discounting level. With these justifications, we therefore keep this hypothesis for the testing in the survey research.

In addition to the hypotheses previously discussed, the exploratory research has enabled the researcher to develop hypotheses for particular consumer characteristic variables where their relationship with other consumer characteristics was not evident in the literature. These factors include **family size, value consciousness, and brand loyalty (loyalty to other athletic footwear brands)**. It has also suggested particular propositions for newly identified factors, including **marital status, managerial position in the organization, and innovativeness**. These additional hypotheses (Ha1 to Ha9) are now discussed.

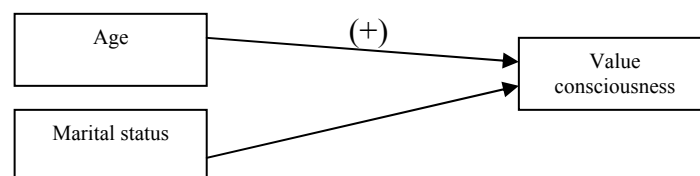
**Hypothesis a1: Age will positively influence value consciousness, and**

**Hypothesis a2: There is a difference in value consciousness across marital status.**

In relation to value consciousness, the exploratory research has suggested a positive relationship between age and value consciousness, justifying that older consumers were more likely than younger consumers to become rational and to trade off between benefits received and the price to pay for a product. Therefore, age is expected to positively influence value consciousness.

In addition, the exploratory research has also suggested that consumers with different marital status were likely to be varied in being value conscious. In particular, married consumers were more likely to be value conscious. Therefore, we expect a difference in value consciousness to exist across marital status. The relationships of age, marital status and value consciousness are illustrated in Figure 3.2.

**Figure 3.2- The influence of age and marital status on value consciousness**

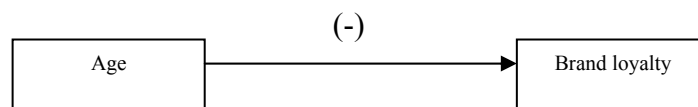


**Hypothesis a3: Age will negatively influence brand loyalty (loyalty to other athletic footwear brands).**

In respect to brand loyalty, the exploratory research has indicated that younger consumers were more likely than older consumers to follow a trend of fashion. Younger

consumers were likely to develop a stronger commitment to a particular well-known athletic footwear brand. If they were loyal to other athletic footwear brand(s), they were less likely to intend to purchase the seasonally discounted Reebok athletic footwear due to their perceptions of high switching costs. Thus, as shown in Figure 3.3, age is expected to have a negative relationship with brand loyalty (loyalty to other athletic footwear brands).

**Figure 3.3- The influence of age on brand loyalty**



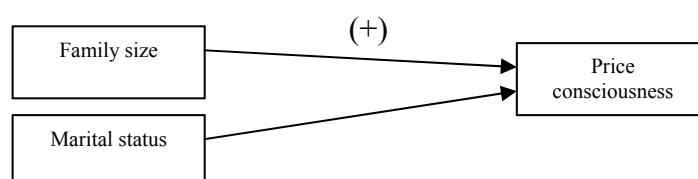
**Hypothesis a4: Family size will positively influence price consciousness.**

**Hypothesis a5: There is a difference in price consciousness across marital status.**

Family size has not been found to have a relationship with any psychographic variables in the literature. We developed this hypothesis based on the key findings of the exploratory research regarding this factor. Family size is expected to have a positive influence on price consciousness because consumers with a smaller family size were likely to be less constraint in their budgets and less price conscious than those with a larger family size.

In relation to marital status, the exploratory research has suggested that married consumers were more likely than single consumers to have higher income from being a couple. Married consumers were less likely to look for monetary savings and to focus on low priced products. They were then less likely to be motivated by the discounting program. Therefore, we expect that there is a difference in price consciousness across marital status. The influences of family size and marital status on price consciousness are illustrated in Figure 3.4.

**Figure 3.4- The influence of family size and marital status on price consciousness**

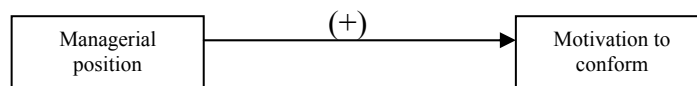




**Hypothesis a6: Managerial position will positively influence motivation to conform to the expectations of reference groups.**

For managerial position in the organization, the exploratory research has indicated that consumers working at a higher managerial level were likely to be more concerned with their self-image, and thus be more motivated to conform to the expectations of their reference groups than those who worked at a lower management level. They in turn were more likely to take into account the expectations and the attitudes of their reference groups towards the seasonally discounted Reebok athletic footwear in their purchase decisions. Therefore, as shown in Figure 3.5, we expect managerial position at work to have a positive influence on the motivation to conform to the expectations of their reference groups.

**Figure 3.5- The influence of ‘managerial position’ on ‘motivation to conform’**

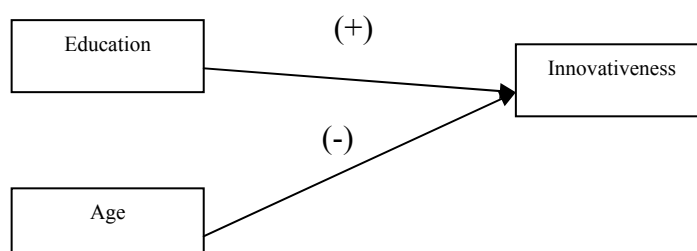


**Hypothesis a7: Education will positively influence innovativeness, and**

**Hypothesis a8: Age will negatively influence innovativeness.**

Regarding innovativeness, the exploratory research has suggested that some groups of consumers were more accepting of change than others. In particular, younger consumers were more likely to be innovative than older consumers. Additionally, highly educated consumers were likely to accept change including new products (Ailawadi et al. 2001; Hawkins et al. 1998). Therefore, the researcher expects that higher educated or younger consumers were more likely than lower educated or older consumers respectively, to be innovative, as illustrated in Figure 3.6.

**Figure 3.6- The influence of education and age on innovativeness**

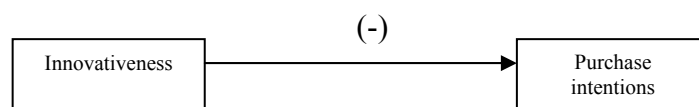


**Hypothesis a9: Innovativeness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.**

The influence of innovativeness on consumer intentions to purchase the seasonally discounted Reebok athletic footwear could be explained by the concept of perceived exploration utility (Ailawadi et al. 2001). Exploration benefits exist when buying a product helps consumers to fulfill their own intrinsic needs for information, variety, or innovativeness (Baumgartner et al. 1996; Kahn & Louie 1990; Kahn & Raju 1991). Innovative consumers are interested in new products (Mowen & Minor 1998), more socially mobile, and make extensive use of commercial media (Hawkins et al. 1998).

Innovativeness should be positively associated with promotional usages because promotions encouraged product trial (Montgomery 1971). However, the researcher adopts the suggestion by the exploratory research indicating a negative relationship between innovativeness and purchase intentions. The reason is that innovative consumers were unlikely to be interested in the seasonally discounted Reebok athletic footwear because they perceived discounted athletic footwear as old or out of date. Buying discounted athletic footwear would not fulfill their needs for innovation. Thus, as illustrated in Figure 3.7, innovativeness is expected to have a negative effect on consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

**Figure 3.7- The influence of innovativeness on purchase intentions**



All hypotheses to be tested in the survey research are summarized in Table 3.9. These include both the relevant preliminary hypotheses and hypotheses additionally developed in this section.

**Table 3.9-Summary of hypotheses to be tested in the survey research**

Hypothesis	Antecedent variables	Response variable	Expected relationships	Sources
H1	A: Income B: Family size C: Marital status	Price consciousness	A: Income will negatively influence price consciousness, B: Family size will positively influence price consciousness, and C: There is a difference in price consciousness across marital status.	The literature  The exploratory research The exploratory research
H2	Gender	Deal proneness	Female consumers are more likely than male to be deal prone.	The literature
H3	Education	Need for cognition	Education will positively influence need for cognition.	The literature
H4	Education	Variety seeking	Education will positively influence variety seeking.	The literature
H5	Education	Quality consciousness	Education will positively influence quality consciousness.	The literature
H6	Age	Market (price) mavenism	Age will positively influence market (price) mavenism.	The literature
H7	A: Age B: Marital status	Value consciousness	A: Age will positively influence value consciousness, and B: There is a difference in value consciousness across marital status.	The exploratory research
H8	Age	Brand loyalty	Age will negatively influence brand loyalty (specifically, loyalty to other athletic footwear brands).	The exploratory research
H9	A: Education B: Age	Innovativeness	A: Education will positively influence innovativeness, and B: Age will negatively influence innovativeness.	The exploratory research The exploratory research
H10	A: Employment status B: Age C: Managerial position at work	Motivation to conform to the expectations of reference groups	A: There is a difference in the level of motivation to conform to the expectations of reference groups across employment status, B: Age will negatively influence motivation to conform to the expectations of reference groups, and C: Managerial position will positively influence motivation to conform to expectations of reference groups.	The literature  The literature  The exploratory research
H11	A: Price consciousness B: Deal proneness C: Need for cognition D: Market (price) mavenism E: Quality consciousness F: Value consciousness G: Brand loyalty H: Variety seeking I: Innovativeness	Purchase intentions	A: Price consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, B: Deal proneness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, C: Need for cognition will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, D: Market (price) mavenism will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,	The literature and the exploratory research

**Table 3.9-continued**

Hypothesis	Antecedent variables	Response variable	Expected relationships	Sources
	J: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear, and K: Motivation to conform to the expectations of reference groups.		E: Quality consciousness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, F: Value consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, G: Brand loyalty will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, H: Variety seeking will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, I: Innovativeness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, J: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will positively influence consumers' purchase intentions, and K: Motivation to conform to the expectations of reference groups will negatively influence consumers' purchase intentions.	The literature and the exploratory research
H12	All eight demographic, nine psychographic, and two normative influencing factors	Purchase intentions	There will be no relationship between these antecedent factors and purchase intention.	The literature and the exploratory research

Source: Developed for this thesis

In brief, this section identified key consumer characteristics expected to have a relationship with the single key response variable (consumer intentions to purchase the seasonally discounted Reebok athletic footwear). Finally, these factors include **eight demographic factors** (age, gender, income, employment, managerial position in the organization, family size, marital status, and education), **nine psychographic factors** (price consciousness, value consciousness, quality consciousness, market mavenism, brand loyalty or loyalty to other athletic footwear brands, variety seeking, need for cognition, deal proneness, and innovativeness), and **two normative influencing factors** (motivation to conform to the expectations of reference group, and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear). In addition, all hypotheses in relation to these factors were summarized, and will be tested in the survey research.

### 3.5 Conclusions

From the review of the literature on factors influencing consumer responses to sales promotions, a number of influential consumer characteristics did emerge. However, there is a lack of studies attempting to explore and model the influence of those factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. So the underlying constructs related to this context have not been well identified.

The exploratory research by means of in depth interviews was conducted (1) to explore relevant consumer characteristic factors and justify how these factors possibly influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear products in the Thai market; (2) to specify the psychographic or demographic variable that could possibly be related to family size, presence of children, value consciousness, and brand loyalty; (3) to determine the appropriateness of the use of purchase intentions as the key response variable, and; (4) to determine if the influence of demographic factors on the key response variable(s) is mediated by psychographic factors.

Three executives from Reebok and one from Super Sports were selected for the interviews because they were knowledgeable persons, and were able to give accurate information on the subject being investigated. The interviews followed a semi-structured-undisguised approach with the face-to-face interactions. The interviews began with wide-open, highly projective general questions and moved to more specific questions regarding antecedent consumer characteristics, the influences of these factors on consumer responses to the seasonally discounted Reebok athletic footwear, and key response variables to be measured.

Content analysis was employed to analyze data collected. Key characteristics of the content measured included frequency, intensity, and direction. Major influential factors from constructs of demographics, psychographics in relation to perceived utility, and normative influencing factors were identified with justifications from respondents.

In summary, key influential *demographic characteristics* include **age, gender, income, employment, managerial position in the organization, family size, marital status, and education**. Major influential *psychographic factors* are **price consciousness, value**

**consciousness, quality consciousness, innovativeness, market mavenism, brand loyalty, variety seeking, need for cognition, and deal proneness. Normative influencing factors** include **motivation to conform to the expectations of reference groups, and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**. All of these factors were expected to have an influence on *consumer responses to the seasonally discounted Reebok athletic footwear*.

Regarding the consumer response variables, utility perceptions and purchase intentions were identified as the key response variables in the exploratory research. On the other hand, most respondents did not perceive consumer attitudes to the seasonally discounted Reebok athletic footwear as important. As utility perceptions were measured under the *psychographic factors* in relation to utility theory (Thaler 1985) in this research, **purchase intentions** has been deemed appropriate to be investigated as the single key response variable.

In relation to the influence of these consumer characteristics on consumer responses to the seasonally discounted Reebok athletic footwear, all respondents supported the second framework depicting *psychographic factors* as intervening factors that mediated the influence of *demographic factors* on *consumer response variables*.

Finally, the findings of this exploratory research were enhanced with the relevant information discussed in the literature (section 2.4) for the final selection of the key factors most relevant to the athletic footwear context and this was followed by a summary of the hypotheses that will be tested in the survey research. Methodology of the survey research will be discussed in the next chapter.

## CHAPTER 4

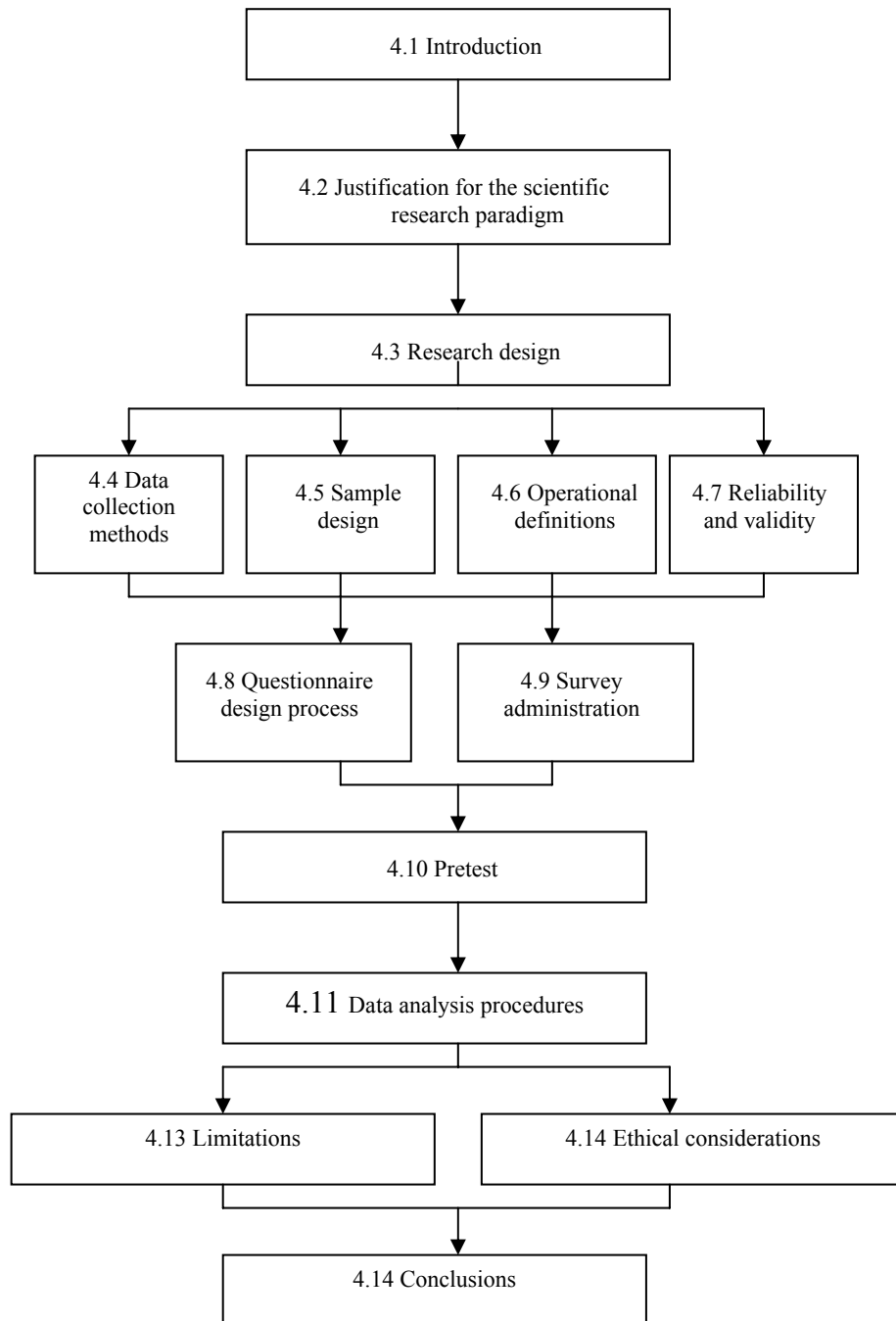
### Research Methodology

#### 4.1 Introduction

The previous chapter proposed hypotheses in relation to consumer characteristics that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear, based on findings of empirical studies and the exploratory research. This chapter describes the research methodology used to collect data for testing the proposed research hypotheses.

There are fourteen sections in this chapter, as illustrated in Figure 4.1. This chapter commences with a justification for the scientific research paradigm (section 4.2). Research design is described in section 4.3. The discussion then moves to data collection methods (section 4.4). Sample design is justified (section 4.5) and is followed by the operational definitions used in this study (section 4.6). Reliability and validity issues are addressed in section 4.7. A questionnaire design process is proposed in section 4.8. Survey administration is discussed next (section 4.9), followed by the process of pretest (section 4.10). Steps and statistical tools used in analyzing data gathered are then justified (section 4.11). Key limitations of this study are mentioned in section 4.12. Ethical issues in the research are then discussed (section 4.13). Finally, conclusions appear at the end of this chapter (section 4.14).

**Figure 4.1**  
**Outline of chapter 4**



Source: developed for this thesis



## **4.2 Justification for the scientific research paradigm**

Social science researchers develop ways to do research based on particular paradigm(s) on which they rely (Guba & Lincoln 1994; Neuman 1997). These paradigms, in turn, guide them in viewing and explaining a phenomenon (Kuhn 1962). There are four alternative paradigms relevant to social research, namely: critical theory; constructivism; positivism; and critical realism (Guba & Lincoln 1994).

Critical theory tends to be associated with the conflict theory, feminist analysis, and radical psychotherapy (Neuman 1997), while constructivism is more likely to be related to humanity research (McPhail 1998). Most ongoing social research, particularly business research, is based on positivism and critical realism paradigms (McPhail 1999; Neuman 1997). Assumptions of these four paradigms are summarized in Table 4.1.

Both positivist and constructivism approaches were adopted in the different stages of research in this thesis. Firstly, constructivist research was deemed appropriate for the stage-one research because the researcher had little knowledge of the research area to be investigated (factors and their influences on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in Thailand). The review of literature in chapter 2 has produced a rich understanding of consumer responses to sales promotions. However, this understanding has been developed based on research studies undertaken in other contexts, in particular, not in the athletic footwear and in the Thai context. Therefore, the researcher adopted the constructivism approach by employing an inductive method to collect and analyze data in order to gain in depth understanding of the research area to be investigated (Neuman 1997; Perry, Reige & Brown 1998). The exploratory research was conducted by interviewing executives from athletic footwear companies. This type of research enables the researcher to clarify concepts, to generate information about the practical possibilities of researching specific (Churchill 1995; Zikmund 1997), and to formulate more precise investigation for identifying relevant variables as well as developing hypotheses (Churchill 1995). The process and findings of the stage-one research have already been discussed in the previous chapter.

**Table 4.1 Comparison of four alternative paradigms**

Issues	Critical theory	Constructivism	Positivism	Critical realism
Ontology (nature of data)	Reality is shaped by social and other forces.	'Reality is developed by people or researchers. Constructions are more or less informed and or sophisticated.	Reality is so simple that it can be measured and understood.	Reality is too complex to be perfectly understood due to the complexity of the world and human mental limitations.
Epistemology (nature of researcher)	Transformative intellectual	Passionate participant	'One-way mirror' observer that Researcher and reality are independent.	Researcher is an integral part of studying a reality. Some objectivity is sought.
Inquiry aim	Critique and transformation of the social, political, cultural structures	Understanding and reconstruction of the constructions that people hold.	Explanation: prediction and control	Similar to positivism
Approach used for achieving new knowledge	Dialogic/ dialectical approach	Hermeneutic/ Dialectic approach	Deductive approach is used as a logical process of deriving a new theory from the known theory.	Inductive approach is used to gain insight about a phenomenon and build the theory from the ground up.
Nature of knowledge	<ul style="list-style-type: none"> <li>Develop a series of structural/ historical insights that will be transform as time passes</li> </ul>	<ul style="list-style-type: none"> <li>Individual reconstructions coalescing around consensus</li> </ul>	<ul style="list-style-type: none"> <li>Verified hypotheses established as facts</li> <li>Gather and analyze data for testing hypotheses and theory</li> </ul>	<ul style="list-style-type: none"> <li>Non-falsified hypotheses that are probable facts</li> <li>Researchers begin with detailed observations of the world. They may start at having only topic and a few vague concepts. As they observe, they refine concepts, and develop empirical generalizations.</li> </ul>
Common methodologies	Qualitative: action research	Qualitative: in depth interviews	Quantitative: survey and experiments.	Qualitative: case studies, interviews, convergent interviewing.
Laws/ generalization	Values are an integral part of social life. No Group's values are wrong only different.	Similar to critical theory	Discover universal, context free- laws.	Limited generalizations that depend on context.

Source: developed for this thesis with entries from Guba & Lincoln (1994); McPhail (1998); Neuman (1997); Zikmund (1997).

At the second stage of this research, a positivist approach was deemed to be most appropriate because information being gathered from this type of research enables the researcher to answer research problems and research objectives (identifying key consumer characteristics, and depicting the influence of these factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market). That is, by employing a deductive approach with a quantitative research

method, the researcher has been able to measure and analyze the relationship between consumer characteristics and the purchase intention variable. This approach also allows hypotheses to be tested and the research findings to be generalized to the population (Guba & Lincoln 1994; Neuman 1997; Zikmund 1997) by using probability sampling. This sampling technique will be discussed in section 4.5. The process of quantitative research is the core of this chapter, and is now detailed.

### **4.3 Research design**

After clarifying the research problems and research objectives (section 1.2), the researcher can now focus on selecting the most appropriate research design (Burns & Bush 1995). A research design is a master plan of the research methods and procedures that should be used to guide data collection and analysis tasks of the research project (Burns & Bush 1995; Hair, Bush & Ortinau 2000; Zikmund 1997). It is the framework or blueprint specifying the type of information to be collected, the sources of data, and the data collection procedure (Kinnear & Taylor 1996). A research design ensures that a research study will be relevant to the research problems and will use economical procedures (Churchill 1995; Kinnear & Taylor 1996).

Research designs are classified into three categories based on the purpose of the research project, namely: exploratory research, descriptive research; and causal research (Burns & Bush 1996; Neuman 1997). These three research categories can be viewed as a continuous process (Churchill 1995), commencing with exploratory research, then descriptive research and finally causal research (Burns & Bush 1995). Firstly, *exploratory research* is used when the researcher aims to gain background information, to define terms, to clarify problems or hypotheses, and to explore a new topic. To describe a phenomenon or measure variables identified and their relationships, *a descriptive research design* is then employed. In turn, descriptive research can provide information which suggests that researchers should conduct causal research to understand why relationships of particular variables exist (Burns & Bush 1995; Churchill 1995; Hair et al. 2000; Neuman 1997; Zikmund 1997). Key characteristics of these three research designs are summarized in Table 4.2.

Exploratory research tends to be flexible while descriptive research is more rigid, and requires a clear specification of the information being investigated (Churchill 1995).

Both descriptive and causal research designs can be viewed as conclusive research because they provide information for evaluating alternative courses of action (Kinnear & Taylor 1996; Zikmund 1997).

**Table 4.2- Summary of characteristics of research designs**

Research design	Key characteristics	Main purposes of the research	Commonly used research methods	Main limitations
Exploratory design	<ul style="list-style-type: none"> <li>• Not intended to provide conclusive information from which a particular course of action can be determined.</li> </ul>	<ul style="list-style-type: none"> <li>• To gain background information to better understand the dimensions of research problems</li> <li>• To formulate possible hypotheses to test</li> <li>• To define terms and concepts</li> </ul>	Qualitative research methods, i.e. focus group interviews, experience surveys	<ul style="list-style-type: none"> <li>• Collecting data through qualitative research methods may yield bias results due to subjective, non-representative, and nonsystematic characteristics of research design.</li> </ul>
Descriptive design	<ul style="list-style-type: none"> <li>• Formal and structured studies</li> <li>• Use scientific methods</li> <li>• Helps evaluate courses of actions</li> <li>• Provide answers to questions such as who, what, when, where, when, and how</li> </ul>	<ul style="list-style-type: none"> <li>• To describe and measure phenomena</li> <li>• To discover or predict associations among variables</li> <li>• To estimate proportions of a population that has these characteristics</li> </ul>	Quantitative research methods, i.e. survey research	<ul style="list-style-type: none"> <li>• Only describes but does not explain associations among variables</li> </ul>
Causal design	<ul style="list-style-type: none"> <li>• Formal and structured studies</li> <li>• Use scientific methods</li> <li>• Allow researchers to investigate changes in one variable while manipulation one or two other variables under controlled condition</li> <li>• Provide answers to 'why' question</li> </ul>	<ul style="list-style-type: none"> <li>• To explain phenomena</li> <li>• To know causal relationships among variables</li> </ul>	Quantitative research methods, especially experimental research	<ul style="list-style-type: none"> <li>• Complex processes, expensive, time-consuming</li> <li>• Never know all the relevant information necessary to prove causal linkages beyond a doubt</li> </ul>

Source: developed for this thesis from Burns & Bush 1995; Cooper & Schindler 2001; Hair, Bush & Ortinau 2000; Kinnear & Taylor 1996; Zikmund 1997

In addition, research studies can be viewed in terms of time dimensions. Research can be of a cross sectional nature when researchers conduct research at one point in time, or of a longitudinal nature when a phenomena is studied over a period of time to track any changes (Cooper & Schindler 2001; Neuman 1997).

In this program of research, multiple designs were employed. Exploratory research was first conducted due to the insufficient knowledge of the area being studied, as discussed in section 4.2. Following this exploratory research, quantitative data were collected,

using the descriptive research design, to achieve research objectives and to allow testing of the hypotheses of this study. Descriptive research was most appropriate to be conducted for the second stage of research because descriptive research enables the researcher to identify key *demographic, psychographic, and normative influencing variables*, and to examine how these factors influence the *purchase intention variable*. Causal research designs were not employed in this research as the researcher was not attempting to explain a specific influence of the investigated variables (Burns & Bush 1995). Next, the discussion turns to data collection methods used in this study.

#### **4.4 Data collection methods**

This section justifies the research methods used to collect primary data for testing the hypotheses developed. Three research methods commonly used by researchers to gather primary data include experiment, observation and survey (Cooper & Schindler 2001; Zikmund 1997). Experiments were considered inappropriate for this research because the researcher did not intervene, manipulate variables, and did not control the research environment to measure the influence of the independent variables on the dependent variable in this study (Cooper & Schindler 2001). Observation was also not suitable since information in relation to respondent characteristics and purchase intention of respondents could not be observed (Kinnear & Taylor 1996; Zikmund 1997).

Survey research method was then most appropriate for this study because it associates with descriptive research situations (Hair et al. 2000; Zikmund 1997). Survey research can be used to collect both quantitative and qualitative data from respondents (Zikmund 1997). In addition, it also approximates the rigorous test for causality (Hair et al. 2000; Neuman 1997; Zikmund 1997). In this study, survey research involves the collection of quantitative data from a sample of elements drawn from a well-defined population through the use of a questionnaire (Reis & Judd 2000). This research method will be used to measure respondents' characteristics and their purchase intentions to the seasonally discounted Reebok athletic footwear (Cooper & Schindler 2001; Neuman 1997; Zikmund 1997). Selected respondents were asked questions and their answers were collected in a structured, precise manner (Hair et al. 2000). This information enables the researcher to test the relationships of variables, hypothesized in chapter 3. (Hair et al. 2000).

Survey research can be conducted through four basic approaches including personal survey, telephone survey, computer-assisted survey and self-administered survey (Burns & Bush 1995; Hair et al. 2000; Kinnear & Taylor 1996). Description and major tools of these survey approaches are summarized in Table 4.3.

**Table 4.3- Description of survey research approaches**

Survey research approach	Description	Key tools
Personal survey	<ul style="list-style-type: none"> <li>• Two way communication</li> <li>• An interviewer asks questions and records answers of respondents in a face-to-face situation</li> </ul>	In-home interviews, Executive interviews, Mall-intercept interviews, Purchase-intercept interviews
Telephone survey	<ul style="list-style-type: none"> <li>• An interviewer ask questions and records answers of respondents through the telephone technology</li> <li>• Lower degree of interaction between the interviewer and the respondents</li> </ul>	Telephone interviews
Computer-assisted survey	<ul style="list-style-type: none"> <li>• The interviewer may read questions to respondents and record their answers using computer or</li> <li>• Respondents respond to research questions through on-line system, or computer disks without any interactions with the interviewer</li> </ul>	Internet surveys, Electronic-mail surveys, Computer-assisted personal interviews, Computer-disk interviews
Self-administered survey	<ul style="list-style-type: none"> <li>• There is little, if any, face-to-face interaction between the interviewer and the respondent</li> <li>• Respondents read questions and records their answers by themselves</li> </ul>	Mail surveys

Source: developed for this thesis from Burns & Bush 1995; Hair Jr., Bush & Ortinau 2000; Kinnear & Taylor 1996

Suggestions by various researchers (Burns & Bush 1995; Hair et al. 2000; Kinnear & Taylor 1996) were followed in order to develop key criteria used for evaluating all survey approaches. Criteria can be grouped into characteristics of information required, researchers' resources and respondent characteristics. The description of each criterion is summarized in Table 4.4. In addition, comparisons of the relative advantages and disadvantages of survey research approach were made for selecting the most appropriate survey approach for this study. These comparisons are summarized in Table 4.5.

**Table 4.4- Description of each criterion used for survey approach selection**

Criteria	Description
<b>Characteristics of information</b> Generalizability	The degree to which data collected from a specific approach can be used to accurately describe population of the study (Burns & Bush 1995; Hair et al. 2000)
Completeness (quantity of data collected)	The degree to which detailed information can be collected from a specific survey approach (Burns & Bush 1995; Hair et al. 2000).
Complexity of tasks	The degree to which the interviewer involves with complicated preparation, administration processes, and efforts of respondents in gathering data (Burns & Bush 1995; Hair et al 2000).
Versatility	The degree to which a survey approach enables the interviewer to help the respondent having a clear understanding of questions (Kinnear & Taylor 1996).
<b>Researcher resources</b> Budget	Budget required for data collection (Burns & Bush 1995; Hair et al. 2000).
<b>Respondent characteristics</b> Diversity	The degree to which respondents have similar characteristics (Burns & Bush 1995; Hair et al. 2000).
Ability to participate	The ability of the interviewer and the respondent to get together in a question and answer interaction (Burns & Bush 1995; Hair et al. 2000).
Willingness to participate	The degree to which respondents incline to share their thoughts (Burns & Bush 1995; Hair et al. 2000).
Non responses	Selected respondents do not respond because they may not be at home or refuse to participate in a survey (Kinnear & Taylor 1996).

Source: developed for this thesis from authors cited

**Table 4.5- Relative advantages and disadvantages of survey approaches**

Criteria	Personal survey	Telephone survey	Computer-assisted survey	Mail survey
<b>Characteristics of information</b> Complexity of tasks	-	+	+	++
Completeness (quantity of data collected)	++	-	-	+
Generalizability	++	-	-	-
Versatility	++	+	-	-
<b>Researcher resources</b> Budget	-	+	-	++
<b>Respondent characteristics</b> Ability to participate	-	+	+	++
Non responses <i>Not at homes</i>	-	-	++	++
<i>Refusals</i>	++	+	-	-
Diversity	++	+	-	-
Willingness to participate	++	-	-	-

++ indicates relative strength; - indicates relative weakness

Source: developed for this thesis from Burns & Bush 1995; Hair et al. 2000; Kinnear & Taylor 1996

From this analysis, the mail survey approach was deemed to be most appropriate and it will be employed to gather data for this study due to following key reasons:

- A mail survey is less expensive and requires fewer staff (only one person required for this research) than other methods (Kinnear & Taylor 1996),

- Respondents are able to conveniently participate in the mail survey being conducted in this research because the time needed to complete the questions does not need to be continuous (Hair et al. 2000),
- Respondents have time to carefully think and answer questions (Cooper & Schindler 2001).
- This study requires only answers from uncomplicated straightforward questions regarding the characteristics of respondents and purchase intentions of the seasonally discounted Reebok athletic footwear. An interaction between the researcher and the respondents is therefore unnecessary, which in turn helps the researcher to avoid interviewer bias (Neuman 1997).
- This mail survey enables the researcher to collect a large amount of data from respondents (Burns & Bush 1995; Hair et al. 2000).
- Non -responses, caused by respondents not being at home, can seriously affect telephone and personal interviews but not mail surveys (Kinnear & Taylor 1996).
- Mail surveys help reach a geographically-diverse population as in this study, where the sample is expected to spread throughout many cities in Thailand (Cooper & Schindler 2001).

However, mail surveys have the following shortcomings:

- *Generalizability and non-response rate*: data collected from the mail survey approach may not be able to completely describe the population (consumers who purchase athletic footwear products) due to low response rates or small samples (Hair et al. 2000). In relation to the response rate issue, strategies to maximize response rates suggested by several researchers (such as Burn & Bush 1995; Dillman 1987; Hair et al. 2000; Kinnear & Taylor 1996; Neuman 1997) were followed in this study. These strategies are further discussed in section 4.9. Small sample size is unlikely to be a serious issue for this study because the database of the largest sports product retail chain in Thailand was employed for the sampling process. This database yielded a large sampling frame, from which sample was drawn.
- *Versatility*: mail surveys do not allow researchers to help respondents to have a clear understanding of the questions (Kinnear & Taylor 1996). However, questionnaires for this study were carefully designed. They involved structured questions with simple instructions that could be followed step-by-step, and



answered easily by respondents. Therefore, assistance from the interviewer was unnecessary (Kinnear & Taylor 1996). How the questionnaire was designed will be detailed in section 4.9.

- *Diversity*: Compared to other survey approaches, mail surveys are likely to perform unfavorably in diverse populations due to the strong possibility of overrepresentation by an extreme minority (Burns & Bush 1995). That is, potential respondents from the database may differ from those who are not on the list. However, as previously mentioned, the database used for the sampling process was substantially large and this could help minimize the effect of different characteristics between respondents and the population.
- *Willingness to participate*: selected respondents may find it much easier to ignore a mail survey than to refuse a personal interview (Hair et al. 2000). Several strategies were implemented in this study to overcome this limitation, for example, using attractive questionnaires, giving incentives to respondents, and clearly stating the importance of this survey and of the cooperation of respondents in the questionnaire. These strategies will be further discussed in section 4.8, and 4.9 respectively.
- *Other limitations* may include inaccurate mailing address. However, this limitation could be minimized as accurate mailing addresses could be obtained from the database.

In brief, this section justified the appropriateness of the use of the mail survey approach for this study. The next section discusses the population of interest and a particular sampling method used for this study.

#### **4.5 Sample design**

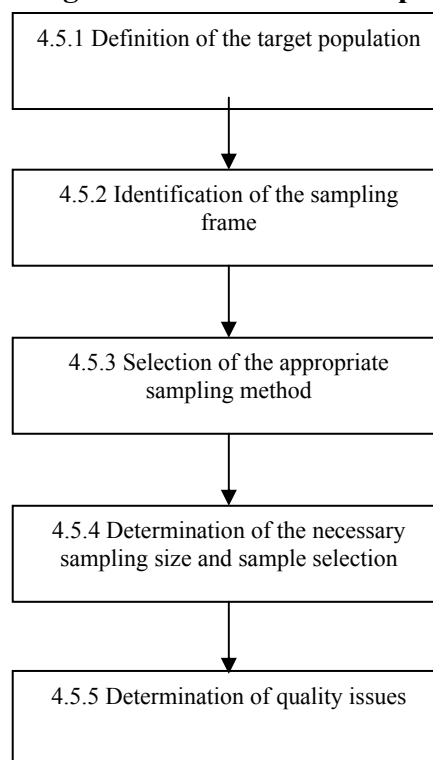
A selection of the appropriate data collection approach has been justified in the previous section. This section discusses a process of respondent selection for this study, involving the nature of sampling and determination of the appropriate sampling design.

A census would be infeasible for this study because researching all elements of the population (Thai consumers who have purchased athletic footwear) would require a substantial budget and would be too time consuming (Cooper & Schindler 2001; Zikmund 1997). Sampling was therefore considered the appropriate technique and was

used for selecting a small number of elements from a larger defined target group of population. By using probability sampling technique, information collected from the small group would allow conclusions to be made about the defined population (Cooper & Schindler 2001; Hair et al. 2000).

Based on the sampling process proposed by a number of researchers (Burns & Bush 1995; Cooper & Schindler 2001; Hair et al 2000; Zikmund 1997), the stages in the selection of a sample for this study are illustrated in Figure 4.2. There are five stages in the sampling process, namely: definition of the target population; identification of a sampling frame; selection of the appropriate sampling method; determination of the necessary sample size and sample selection; and determination of quality issues. These stages are discussed in turn.

**Figure 4.2**  
**Stages in Selection of a Sample**



Source: developed for this thesis from Burns & Bush 1995; Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997

#### **4.5.1 Definition of the target population**

The first task of the researcher in a sampling plan is to identify the target population or the complete group of elements that should be investigated (Hair et al. 2000). The target population should be carefully defined because incorrect or unclear definition of the population is likely to produce misleading results (Zikmund 1997). The research

objectives are the guidelines for identifying population elements that should share a common set of characteristics (Zikmund 1997), and should be unique and countable (Hair et al. 2000).

Main data collected in this study involved a number of antecedent consumer characteristics. Specifically, these characteristics included consumers' *demographic* and *psychographic characteristics*, *normative influencing factors*, and *purchase intentions* of the seasonally discounted Reebok athletic footwear in the Thai context. The population elements, as considered appropriate, were therefore all Thai consumers who have purchased athletic footwear in the Thai market during the past five years. They excluded consumers who have purchased other athletic product categories and those buying athletic footwear from other contexts (specifically, those buying athletic footwear from outlets in other countries).

#### **4.5.2 Identification of the sampling frame**

After identifying the target population elements, a sampling frame was then developed. A sampling frame is a list of the operational (working) population elements from which a sample can be drawn (Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997). When a sampling frame is inappropriately identified, such as including irrelevant elements or excluding relevant elements, a sampling frame error exists. This error can result in misleading and inaccurate research findings (Hair et al 2000; Zikmund 1997).

The database of Super Sports was the best available source for developing the sampling frame for this mail survey research because Super Sports was the largest retail chain store selling athletic products and accessories in the Thai market. It had thirty five outlets located in major provinces through out Thailand. The database of this company contained a large number of members (47,049 persons) who have purchased athletic footwear and have voluntarily applied to be a member of this store.. Although this database did not provide a list of consumers who have specifically purchased Reebok athletic footwear, it has enabled the researcher to generate a list of consumers who have purchased athletic footwear brands sold in this store. Samples to be drawn from this list will be able to give information required for this mail survey research, specifically the information regarding the purchase intentions to the seasonally discounted Reebok athletic footwear. In respect to sales promotional programs, Super Sports from time to

time has normally implemented nationwide consumer-oriented sales promotional campaigns, in particular price discounting programs, to stimulate consumer purchases.

The sampling frame of this study was therefore a list of members of Super Sports, who have purchased athletic footwear products during the past five years. This sampling frame should help minimize sampling error because it contained a sufficiently large number of relevant target elements from nationwide sources. Simultaneously, this sampling frame enabled the researcher to exclude irrelevant elements, such as consumers who purchase non-footwear products.

#### **4.5.3 Selection of the appropriate sampling method**

Drawing a sample is a very important step of the sampling process and survey research (Hair et al. 2000). There are two basic sampling methods: probability; and non-probability sampling (Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997).

Probability sampling is a technique of drawing a sample where each sampling unit has a known, nonzero probability of being selected. Non-probability sampling is a sampling process where the probability of selection of each sampling unit is not known (Hair et al. 2000; Zikmund 1997).

Non-probability sampling techniques were used by most of the previous studies undertaken in this research area, as previously discussed in chapter 1. This sampling technique could result in samples being unrepresentative. And this in turn resulted in research findings being limited only to just samples who provided the raw data in those surveys (Zikmund 1997). To fill this gap, a probability sampling method was used in this study because this sampling method enables the researcher to gather data from samples that represent the target population. This in turn allows this study to generalize research results to the population (Hair et al. 2000; Zikmund 1997).

Probability sampling can be achieved using one of the four key sampling tools, namely: simple random sampling; systematic random sampling; stratified random sampling; and cluster sampling (Burns & Bush 1995; Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997). Descriptions, advantages and disadvantages of these sampling tools are summarized in Table 4.6.

Stratified and cluster samplings could not be employed because these sampling tools require the researcher to identify and to use a particular basis or variables for stratifying or clustering sampling units into strata or clusters, respectively. However, in this research, such variables were as yet unknown.

Systematic sampling is one of the easiest ways of sampling techniques (Churchill 1995). In most cases, a systematic sample and a simple random sample yield virtually equivalent sampling results (Cooper & Schindler 2001; & Neuman 1997). However, systematic samplings cannot be substituted for simple random samplings when elements in the sampling list are arranged in some kind of pattern (Neuman 1997) or the sampling list is not random in character (Zikmund 1997). The systematic sampling technique, when employed with the use of a sampling list that has a systematic pattern, would result in biased samples because there would be a systematic pattern of selecting sampling units (Zikmund 1997). As a result, samples are unlikely to be randomly selected and they may not be representative of the defined population (Hair et al. 2000).

Systematic sampling was not considered appropriate to be used in this study because the sampling list (the list of Super Sports members) had a specific systematic pattern. That is, after clients applied for being a member of Super Sports, all of the application forms from each branch were sent to the Super Sports head office in Bangkok every week. Before the received data were inputted into the Super Sports database, most of these application forms were categorized by province from where the application forms were sent. Next, data from each of these province categories were inputted simultaneously. With these data inputting steps, data from the Super Sports members were arbitrarily grouped before samples were selected. Therefore, elements in the sampling list of Super Sports were likely to be systematically, rather than randomly, ordered. As a result, samples generated from the sampling list of Super Sports by means of the systematic sampling approach may be less representative of the population defined in this research than that generated from the use of the simple random sampling technique (Burns & Bush 1995).

To avoid a use of non-representative samples in this research, it was, therefore, decided to generate samples using the simple random sampling technique. The simple random sampling was more easily to implement in this study due to the availability of the

database of athletic footwear consumers, and the convenience in assigning numbers to this population element. How to proceed with this sampling tool will be further discussed in section 4.5.5.

**Table 4.6- Description of probability sampling tools**

<i>Tools</i>	<i>Description</i>	<i>Advantages</i>	<i>Disadvantages</i>
Simple random sampling	<ul style="list-style-type: none"> <li>• Every sampling unit in the target population has a known, equal, and nonzero chance of being selected</li> <li>• Researchers assign each member of sampling frame a number, then draw sample units using random number table/generator</li> </ul>	<ul style="list-style-type: none"> <li>• Easy to implement with computer assistance</li> <li>• Easy to analyze data and compute error</li> <li>• Only minimum knowledge about population required</li> </ul>	<ul style="list-style-type: none"> <li>• A complete list of target population required</li> <li>• Difficult to implement as each target population elements must be assigned a number prior to sampling</li> </ul>
Systematic random sampling	<ul style="list-style-type: none"> <li>• Similar to simple random sampling plus</li> <li>• Requires the defined target population to be ordered in some way</li> <li>• Researchers use order of sampling frame, randomly select a starting point, then select every k<sup>th</sup> sample units at a pre-selected skip interval (predetermined sampling fraction, <math>k = \text{total population size} / \text{size of the desired sample}</math>)</li> </ul>	<ul style="list-style-type: none"> <li>• Easier to use and less expensive than Simple random sampling</li> <li>• Easy to determine sampling distribution of mean or proportion</li> </ul>	<ul style="list-style-type: none"> <li>• Periodicity within the population may skew the sample and results</li> <li>• A biased estimate will result due to the start point if the population list has a monotonic trend</li> <li>• Researcher must know the sample size of sampling units that make up the defined target population for making a sampling fraction</li> </ul>
Stratify random sampling	<ul style="list-style-type: none"> <li>• Classify population into homogeneous strata and randomly select sample units from each strata</li> <li>• Combine the samples from each stratum to represent population</li> </ul>	<ul style="list-style-type: none"> <li>• Researchers control sample size in strata</li> <li>• Ensure the representativeness in the sample</li> <li>• Enable to study each stratum and make relative comparisons</li> <li>• Reduce variability for some sample size</li> </ul>	<ul style="list-style-type: none"> <li>• Must identify basis or variables used for stratifying population into strata prior to sampling</li> <li>• If stratified lists are not available, they can be costly to prepare</li> </ul>
Custer sampling	<ul style="list-style-type: none"> <li>• Sampling units are divided into mutually exclusive and exhaustive clusters</li> <li>• Each cluster is expected to be representative of the heterogeneity of the target population</li> <li>• Researchers randomly select sampling units from only one cluster</li> </ul>	<ul style="list-style-type: none"> <li>• Easy to do without a population list</li> <li>• Lowest cost per sample, especially with geographic clusters</li> <li>• If properly done, biased estimate of population parameters can be eliminated</li> </ul>	<ul style="list-style-type: none"> <li>• Must identify basis or variables used for clustering population into cluster prior to sampling</li> <li>• May produce lower statistical efficiency due to subgroups being homogeneous rather than heterogeneous</li> </ul>

Source: developed for this thesis from Burns & Bush 1995; Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997

#### **4.5.4 Determination of the necessary sample size and sample selection**

The desired sample size has to be determined because it can affect the accuracy of the results (Burns & Bush 1995). As this research will use regression estimations to test the proposed hypotheses, a sample size of 500 was deemed to be most appropriate for this study that measured 19 independent variables because this sample size meets the recommendation for the use of multiple regression analysis, requiring the ratio of observations of at least 15 to 20 for each independent variable (Hair et al. 1998). This rule was followed in order to minimize the adverse effect of a small sample size on the generalizability of the research results when performing a multiple regression analysis (Hair et al. 1998). Regression analysis will be discussed in section 4.11.

To select samples for sending the questionnaire, firstly, total samples were calculated by dividing the determined sample size (500) by the acceptable response rate (30%). The acceptable response rate will be discussed in section 4.9. This calculation resulted in achieving the total sample of 1,600. Microsoft Excel was then used to randomly draw, and to generate a list of 1,600 sample units from the identified sampling frame consisting of individual consumers who purchased athletic footwear from Super Sports and were members of this store. This list was further checked to assure the completeness of the name, surname, and mailing address of these samples. Finally, questionnaires were mailed to all of these 1,600 members.

#### **4.5.5 Determination of quality issues**

The quality of sample elements must be assessed because errors or mistakes can exist during the sampling process. There are two basic errors that can possibly affect the quality of survey research, namely: sampling error; and non-sampling error (Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997).

Sampling error refers to a difference between the value of a sample's characteristics and that of the targeted population (Zikmund 1997). This error exists due to mistakes made in the process of sample element selection (Hair et al. 2000). To minimize possible mistakes, care was taken to ensure that samples were appropriately selected, as discussed in the previous section.

In addition to the sampling error, sampling units may not perfectly represent the population due to chance variation in the process of sampling selection (Zikmund 1997). However, sample units generated from the probability sampling approach are likely to be good approximations of the population because sampling errors follow chance variations, thus, they are likely to cancel each other out when averaged (Zikmund 1997).

Non-sampling errors are all biases other than sampling errors (Zikmund 1997) that can exist at any stage of the research process (Hair et al. 2000). For example, sampling frame error caused by inaccurately defined target population, measurement error caused by inappropriate scale/question measurements, mistakes in data collection, recording responses and non-responses from sample elements (Zikmund 1997). Non-sampling errors will be discussed in the following sections.

In summary, this section justified the sampling process for this study. The target population was all Thai consumers who have purchased athletic footwear in Thailand during the past five years. A list of members of Super Sports who have purchased athletic footwear products was selected as the sampling frame for this study. Simple random sampling was used for the sample selection. The sample size of 500 was targeted for this study. The sample selection process was strictly followed to ensure that sampling errors were minimized.

#### **4.6 Operational definitions**

Before a scale of measurement is developed, the researcher must determine exactly what it is to be measured (Furlong, Lovelace & Lovelace 2000; Hair et al. 2000). Concepts or variables in this study were not directly observable (Hair et al. 2000; Kinnear & Taylor 1996), so they have to be operationalized in a way that enables the researcher to measure them (Vogt 1993).

Conceptual and operational definitions of variables measured in this study were borrowed and were slightly modified from previous studies. These definitions are presented in Table 4.7. In the first column, concepts used in this study are identified. The second column identifies relevant conceptual definitions and the third column addresses operational definitions of each conceptual definition. The fourth column indicates



sources of operational definitions being developed, and the last column addresses which questions on the questionnaire match the variables.

**Managerial position in the organization** was the only variable being operationally developed from the suggestions by respondents in the exploratory research stage. This variable ranged from top, middle, junior, and non-management levels. All *psychographic concepts* were operationally defined using multiple indicators. Examples of these are those used as indicators of the concept of **price consciousness**, measuring the degree to which the respondents rely tremendously on the lowest priced brand when choosing an athletic footwear brand (Huff & Alden 1998), and the degree to which the respondents spend their extra time to find the lowest priced brand (Lichtenstein & Ridgway 1993).

In relation to **brand loyalty**, since this study focused on consumers who were loyal to other athletic footwear brands and their responses to the seasonally discounted Reebok athletic footwear, this variable was developed to measure the degree to which consumers were loyal to other athletic footwear brands (not Reebok).

For **innovativeness**, this variable has been investigated by particular studies, such as Ailawadi et al. (2001), and McCann (1974), but has not been found to have a significant effect on response variables. In this study, **innovativeness** was not defined as the degree to which consumers are interested in purchasing a new brand as that of McCann (1974), or the degree to which consumers are interested in buying the athletic footwear with a new functional technology, because there would be no major new athletic footwear brands or athletic footwear with a new technology entering the Thai market during this research. The research followed the suggestion by the exploratory research, and defined innovative characteristic as the degree to which consumers attend to new athletic footwear models. The reason was that athletic footwear appears to be seasonal products and athletic footwear companies have been likely to launch new athletic footwear models seasonally.

**Table 4.7- Concepts and operational definitions used in this thesis**

Variables	Conceptual Definition	Operational Definition	Sources	Survey question
<b>Demographic Factors</b>				
Gender	Gender of respondents	Gender identified (Male or female)	Adapted from Ailawadi et al. 2001; and Super sports	4.1
Age	Age of respondents	Year of age of respondents	Adapted from Ailawadi et al. 2001; and Super sports	4.2
Education	Level of education of respondents	Degree of education received	Adapted from Narasimhan 1984aa	4.3
Occupation	Employment status	Student, unemployed, part time employed, full time employed, self-employed, retired, or homemaker	Adapted from Cronovich et al. 1997; and Mittal 1994	4.4
	Respondent's managerial position in the organization	Managerial level in the organization	The exploratory research	4.5
Marital status	Marital status of respondents	Respondents are married or single or divorced	Adapted from Cho & Kang 1998; and Super sports	4.6
Family size	Number of members in the respondent family	Number of members living with the respondent family	Adapted from Mowen & Minor 1998; and Narasimhan 1984aa	4.7
Income	Monthly family income	Monthly family income	Adapted from Ailawadi et al. 2001; and Super sports	4.8
<b>Psychographic factors</b>				
Price consciousness	The degree to which consumers focus on paying low price and thus tend to purchase the lowest priced athletic footwear	<ul style="list-style-type: none"> <li>• The degree to which respondents rely heavily on the lowest priced athletic footwear when buying this product.</li> <li>• The degree to which respondents are willing to spend their extra time to find the lowest priced athletic footwear.</li> <li>• The degree to which respondents compare prices of different athletic footwear brands to find the lowest priced one.</li> <li>• The degree to which respondents feel it is necessary to choose the lowest priced athletic footwear, when buying this product.</li> </ul>	Adapted from Lichtenstein &, Ridgway 1993	3.1
				3.11
				3.19
				3.38

**Table 4.7- continued**

<b>Variables</b>	<b>Conceptual Definition</b>	<b>Operational Definition</b>	<b>Sources</b>	<b>Survey question</b>
Value consciousness	The degree to which consumers trade off between the product's perceived quality relative to its perceived price	<ul style="list-style-type: none"> <li>• The degree to which respondents attempt to maximize the quality they get for the money they spend when buying this product.</li> <li>• The degree to which respondents buy cheaper athletic footwear but they still must meet certain quality requirement.</li> <li>• The degree to which respondents simultaneously take into account product quality and low price, when purchasing athletic footwear.</li> <li>• The degree to which respondents ensure that they get the best value from the money they spend for a pair of athletic footwear.</li> </ul>	Adapted from Lichtenstein, Netemeyer & Burton 1990; and Lichtenstein & Ridgway 1993	3.8 3.12 3.30 3.39
Quality consciousness	The degree to which consumers use a price of athletic footwear as a key indicator of the product quality	<ul style="list-style-type: none"> <li>• The degree to which respondents give up high quality for a lower price.</li> <li>• The degree to which respondents perceive that the higher the price of the product, the higher the quality.</li> <li>• The degree to which respondents always want to pay a bit more for the best.</li> <li>• The degree to which respondents perceive that the price of a athletic footwear product is a good indicator of its quality.</li> </ul>	Adapted from Lichtenstein, Bloch & Black 1988; and Lichtenstein & Ridgway 1993	3.20 3.22 3.29 3.34
Innovativeness	The degree to which consumers are interested in and purchase a new arrival athletic footwear model	<ul style="list-style-type: none"> <li>• The degree to which respondents perceive that they are often the first person in the group of their friends or their family to purchase a new athletic footwear model.</li> <li>• The degree to which respondents are interested in the information about new models of athletic footwear.</li> <li>• The degree to which respondents pay more attention to new athletic footwear models than the current ones, when purchasing a pair of athletic footwear.</li> </ul>	Adapted from Ailawadi et al. 2001; Gatignon & Robertson 1985; Hoyer & MacInnis 1997; McCann 1971; and the exploratory research	3.10 3.25 3.37

**Table 4.7- continued**

<b>Variables</b>	<b>Conceptual Definition</b>	<b>Operational Definition</b>	<b>Sources</b>	<b>Survey question</b>
Market (price) mavenism	The degree to which consumers become a source of information of discounting programs of athletic footwear products and can suggest others regarding places to purchase for the discounted products	<ul style="list-style-type: none"> <li>• The degree to which respondents perceive that they are better able than most people to tell someone where to buy athletic footwear products to get the best buy</li> <li>• The degree to which other people think of respondents as a good source of promotional information.</li> <li>• The degree to which respondents like helping people by providing them with promotional information and suggestions of places to purchase athletic footwear products.</li> <li>• The degree to which respondents perceive that they are an expert when it comes to suggesting places to shop for discounted athletic footwear products.</li> </ul>	Adapted from Lichtenstein & Ridgway 1993	3.2  3.9  3.18  3.41
Brand loyalty (loyalty to other athletic footwear brands, not Reebok)	The degree to which consumers commit to an athletic footwear brand and continue purchasing that brand without purchasing other brands	<ul style="list-style-type: none"> <li>• The most favorite athletic footwear brand of respondents</li> <li>• The degree to which respondents buy only their most favorite athletic footwear brand.</li> <li>• The degree to which respondents choose another athletic footwear brand if their most favorite brand is not available at a shopping outlet.</li> <li>• The degree to which respondents are willing to search for their favorite athletic footwear brand at other outlets if it is not available at a shopping outlet.</li> </ul>	Adapted from Ailawadi et al. 2001; McCann 1974	3.7  3.16  3.32  3.42
Variety seeking	The degree to which consumers switch to alternative athletic footwear brands for a change of pace and reducing their boredom	<ul style="list-style-type: none"> <li>• The degree to which respondents perceive that using the same athletic footwear brand over and over again increases their boredom</li> <li>• The degree to which respondents buy different brands to reduce their boredom.</li> <li>• The degree to which respondents feel better when buying different athletic footwear brands from time to time.</li> <li>• The degree to which respondents buy different athletic footwear brands to get some variety.</li> </ul>	Adapted from Ailawadi et al. 2001; and Steenkamp & Baumgartner 1992	3.4  3.14  3.24  3.40

**Table 4.7- continued**

<b>Variables</b>	<b>Conceptual Definition</b>	<b>Operational Definition</b>	<b>Sources</b>	<b>Survey question</b>
Need for cognition	The degree to which consumers are pleased to put their effort on thinking, deliberating, and contemplating of athletic footwear products and relevant information prior to an actual purchase	<ul style="list-style-type: none"> <li>• The degree to which respondents perceive that deliberate thinking is necessary for purchasing athletic footwear.</li> <li>• The degree to which respondents require much thinking when purchasing athletic footwear.</li> <li>• The degree to which respondents feel satisfied when using a deliberate thought when purchasing a pair of athletic footwear.</li> </ul>	Adapted from Ailawadi et al. 2001; and Hoyer & MacInnis 1997	3.5 3.21 3.27
Deal proneness	The degree to which consumers increase their propensity to discounted athletic footwear because a deal in the form of a purchase offer positively effects purchase evaluations	<ul style="list-style-type: none"> <li>• The degree to which respondents perceive that price discounting programs play a major part in their purchase decisions when buying a pair of athletic footwear.</li> <li>• The degree to which respondents are more likely to buy a pair of athletic footwear that is on sale.</li> <li>• The degree to which respondents perceive that when buying a pair of athletic footwear that is on sale, they feel that they are getting a good deal.</li> <li>• The degree to which respondents perceive that buying a discounted athletic footwear brand makes them feel good.</li> </ul>	Adapted from Cho & Kang 1998; and Thaler 1983	3.6 3.15 3.23 3.31
<b>Normative influencing factors</b>				
Motivation to conform to attitudes of reference groups	The degree to which consumers care about attitudes of their reference groups	<ul style="list-style-type: none"> <li>• The degree to which respondents feel bothersome when their reference groups disapprove of their purchase of athletic footwear products.</li> <li>• The degree to which respondents perceive that their purchase decisions in relation to athletic footwear products depend on how their friends or their family wish them to behave.</li> <li>• The degree to which respondents perceive that it is important to them to fit in with what their friends or their family think about a purchase of athletic footwear products.</li> <li>• The degree to which respondents are concerned about how their friends or their family make judgments about them by the athletic footwear that they buy.</li> </ul>	Adapted from Ailawadi et al. 2001	3.3 3.13 3.26 3.35

**Table 4.7- continued**

<b>Variables</b>	<b>Conceptual Definition</b>	<b>Operational Definition</b>	<b>Sources</b>	<b>Survey question</b>
Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear	Consumer perceptions of attitudes of reference groups towards a purchase of the seasonally discounted Reebok athletic footwear	<ul style="list-style-type: none"> <li>• The degree to which respondents perceive that their friends and family would be embarrassed to buy a pair of the seasonally discounted Reebok athletic footwear.</li> <li>• The degree to which respondents perceive that their friends and family think that purchasing a pair of the seasonally discounted Reebok athletic footwear would damage their self-image.</li> <li>• The degree to which respondents perceive that their friends and family perceive that it is smart to buy a pair of the seasonally discounted Reebok athletic footwear.</li> <li>• The degree to which respondents perceive that their friends and family like to buy a pair of the seasonally discounted Reebok athletic footwear.</li> </ul>	Adapted from Huff & Alden 1998	3.17  3.28  3.33  3.36
<b>Response variable</b>				
Purchase intention	The degree to which consumers are willing to purchase Reebok athletic footwear promoted through the 30% seasonal price-discounting program.	<ul style="list-style-type: none"> <li>• The degree to which respondents would be willing to buy the 30 % seasonally discounted Reebok athletic footwear.</li> </ul>	Adapted from Cho & Kang 1998; and Mowen & Minor 1998	2.1

Source: developed for this thesis from the authors cited

#### 4.7 Reliability and validity

Good measurement should be both reliable and valid (Furlong et al. 2000; Neuman 1997). A questionnaire is reliable when it provides consistent results over time and across situations (Hair et al. 2000; Neuman 1997; Zikmund 1997). Validity can be obtained when a questionnaire measures what we intend to measure (Hair et al. 2000; Neuman 1997; Zikmund 1997). Studies using invalid questionnaires can yield misleading answers to research questions (Furlong et al. 2000).

Four main types of validity of measurement are relevant to this study; namely *face or content, construct, convergent, and discriminant validities*. *Face validity* refers to the degree to which a measure logically appears to reflect what it intends to measure (Hair et al. 2000; Leary 1995; Neuman 1997; Zikmund 1997). Evaluation of face validity involves the subjective judgment of researchers. If researchers believe that a measure provides sufficient coverage of the concept, a measure has face validity (Zikmund 1997).

In relation to *construct validity*, much behavioral research has measured hypothetical concepts, which cannot be directly measured, but are inferred on the basis of empirical evidence, such as self-concept, motivation and psychographics (Leary 1995). To assess validity of hypothetical concepts, construct validity should be taken into account. Construct validity is for measures with multiple indicators, which assess whether or not measures operate in a consistent manner (Neuman 1997). Construct validity can be measured by assessing *convergent and discriminant validities* (Churchill 1979).

*Convergent validity* is evident when multiple measures of the same concept operate in similar ways and are highly associated to each other (Neuman 1997). On the other hand, *discriminant validity* can be achieved when multiple measures of one concept are less likely to associate with others of dissimilar or other concepts (Burns & Bush 1995; Churchill 1979).

To strengthen the reliability and the validity of the questionnaire used in this research, all concepts were clearly conceptualized as previously discussed in section 4.6. Meanings of all concepts have been clearly defined in both conceptual and operational levels to ensure that indicators were not measuring more than one concept. In addition,

rather than using a lower level of measurement, such as nominal or ordinal scale, most of the key questions were developed using a higher level of measurement, such as a Likert scale. This scale allows the researcher to collect more detailed and precise information (Neuman 1997). The scale of measurement will be further detailed in section 4.8.

Next, multiple indicators were used in measuring each of the psychographic and normative influencing variables because the use of multiple questions enables this study to measure a wider range of the meaning of a concept than does a single indicator (Neuman 1997). And lastly, all of the key indicators measuring psychographic and normative influencing constructs were not newly developed items. These items were borrowed from those employed in previous studies undertaken to investigate these influential factors (such as Ailawadi et al. 2001; Huff & Alden 1998; Lichtenstein & Ridgway 1993; Mittal 1994), and then were slightly modified in order to make them most relevant to the athletic footwear context. These steps are likely to assure that the questionnaire developed was sufficiently reliable and valid.

However, due to slight modifications of the indicators, and the translations of these items into the Thai language, it was decided to further examine face validity of this questionnaire. To increase face validity, a draft questionnaire with the items developed (English version) was submitted to the discipline supervisors for assessing face validity and suggesting amendments (Burns & Bush 1995; Kinnear & Taylor 1996; Neuman 1997). The researcher refined the questionnaire based on the suggestions received. The questionnaire was thus translated into Thai. Next, the questionnaires, both in English and Thai versions, were submitted to the Thai academic researchers and experts in the consumer research field for assessing face validity and suggesting amendments in relation to the language translations. The questionnaire was then refined based on these suggestions. Finally, this questionnaire was pretested with target respondents. The process of pretest will be discussed in section 4.10. In addition, all indicators were statistically tested on reliability and validity using the factor analysis. This analysis approach will be justified in section 4.11.

In summary, this section discussed key criterion for determining quality of measurements, namely: reliability and validity. A measurement should have high



reliability and validity. That is, it should measure what it intends to measure and provide consistent results. The next section outlines the questionnaire design process.

#### **4.8 Questionnaire design process**

This section provides a justification of steps taken to develop the questionnaire used in this study. Questionnaire development is a systematic process in which the researcher deliberately considers established sets of scale measurements, and formats them into a complete instrument for collecting primary data from respondents (Burns & Bush 1995; Hair et al. 2000).

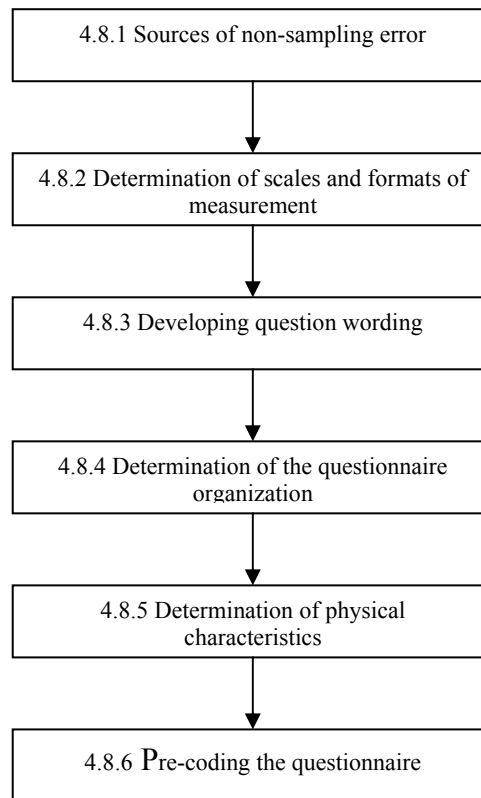
Questionnaire design is an essential process in survey research because it translates research questions into specific questions that can be asked of the respondents, (Burns & Bush 1995) to capture respondents' true information (Hair et al. 2000). In addition, a good questionnaire encourages respondents to provide adequate responses, and discourages them from refusing to cooperate with the researcher (Cooper & Schindler 2001).

Based on questionnaire development processes, developed by a number of researchers (Burns & Bush 1995; Cooper & Schindler 2001; Hair et al. 2000; Kinnear & Taylor 1996; Neuman 1997; Zikmund 1997), a questionnaire development process for this study is proposed and outlined in Figure 4.3. The process involves six key steps, namely: sources of non-sampling error; determination of scales and formats of measurement; developing question wording; determination of the questionnaire organization; determination of physical characteristics; and pre-coding the questionnaire. These steps are discussed next.

##### **4.8.1 Sources of non-sampling error**

Non-sampling errors are all biases excluding sampling errors, which may exist at any stage of the research process (Hair et al. 2000; Zikmund 1997). They are not easily measurable and do not reduce with sample size (Kinnear & Taylor 1996). Non-sampling errors can affect the quality of a mail survey (Zikmund 1997). However, non-sampling errors can be controlled since they emerge from human mistakes in either the designing or executing of a survey design (Hair et al. 2000). They include respondent and administrative errors (Zikmund 1997).

**Figure 4.3**  
**Questionnaire design process**



Source: developed for this thesis

Respondent errors exist when respondents do not cooperate and/or do not give truthful answers. They consist of non-response and response errors (Hair et al. 2000; Zikmund 1997). Administrative errors are caused by improper administrations or executions of a research task. They include errors, such as data processing errors and sample selection errors (Hair et al. 2000; Zikmund 1997). Sections that discuss non-sampling errors are outlined in Table 4.8.

**Table 4.8- Sections that discuss non-sampling errors**

Non-sampling errors	Section
Respondent errors <ul style="list-style-type: none"> <li>• Non-response errors (i.e. Refusal, Wrong mailing address, and Self-selection bias)</li> <li>• Response errors (i.e. Acquiescence bias, Prestige bias, Auspices bias, Social desirability bias, Biases from questionnaire organization)</li> </ul>	Survey administration (section 4.9) Questionnaire design process (section 4.8)
Administrative errors <ul style="list-style-type: none"> <li>• Data processing error</li> <li>• Sample selection error</li> </ul>	Data analysis procedures (section 4.11) Sample design (section 4.5)

Source: developed for this thesis from Burns & Bush 1995; Hair et al. 2000; Kinnear & Taylor 1996; and Zikmund 1997

#### 4.8.2 Determination of scales and formats of measurement

The second step of the questionnaire development process is to determine appropriate scales and formats of measurement. Various scales and formats of measurement were adopted in this study to measure both independent and response variables.

**Scales of measurement.** A scale is a measure the researcher uses to capture the intensity, direction, level, or potency of a concept, and turn it into numerical data (Neuman 1997). Different types of scales yield different levels of information that unequally allow the researcher to describe about the object of study (Burns & Bush 1995). Four types of scales in relation to numerical system are *nominal*, *ordinal*, *interval* and *ratio* (Cooper & Schindler 2001; Zikmund 1997).

A *nominal scale* is the simplest type of scale. In this research, the numbers were assigned to responses for identification or classification purpose (Cooper & Schindler 2001; Zikmund 1997). Nominal scales were used to categorize respondents into groups pertaining to certain *demographic variables* such as **gender**, **employment status** and **marital status**.

An *ordinal scale* identifies, categorizes and also rank-orders the categories (Burns & Bush 1995). The researcher can determine the greater or lesser value, but not distance, among responses (Cooper & Schindler 2001). In this study, **education** and **managerial position in the organization** were measured using ordinal scale.

Another type of scale of measurement is an *interval scale*. Interval scales not only arrange responses according to their magnitudes but also measure the order or distance in units of equal intervals (Zikmund 1997). However, the zero value of responses is arbitrary (Cooper & Schindler 2001). An interval scale allows demonstration of absolute differences between each scale point (Hair et al. 2000).

Interval scales were the key measurement levels employed in this research to measure and translate consumer characteristics into quantitative information. Variables investigated in this form include **age**, **family income**, all *psychographic* and **purchase intention** variables. The use of this level of measurement enables the researcher to achieve a higher level of measurement than nominal and ordinal scales, and allows the

application of powerful statistical techniques for determining correlations of variables (Burns & Bush 1995). This measurement scale will be further discussed in the next section (formats of measurement).

Finally, a *ratio scale* has all the properties of the first three scales plus having an absolute zero point (Hair et al. 2000; Zikmund 1997). Ratio data present the actual amounts of a variable (Cooper & Schindler 2001) that can be absolutely compared (Hair et al. 2000). It is the most powerful type of scale to which all statistical tools can be applied (Cooper & Schindler 2001). In this research, ratio scales were used to measure the variable of **family size**.

In relation to measurement scales, formats of measurement are also an important issue for developing questions. Formats of measurement are discussed next.

**Formats of measurement.** In this section three different characteristics of questions commonly used by researchers are discussed. They are *open-ended questions*, *close-ended questions* (Burns & Bush 1995; Neuman 1997; Zikmund 1997) and *scaled-responses questions* (Burns & Bush 1995).

*Open-ended questions* give no response options to respondents, and respondents are free to use their own words in answering questions (Burns & Bush 1995; Kinnear & Taylor 1996; Zikmund 1997). Open-ended questions were used in the exploratory research to provide insight and a great amount of information (Zikmund 1997). In addition, open-ended questions can be used as introductory questions to establish rapport and to gain the respondents' cooperation in answering more structured questions (Kinnear & Taylor 1996; Zikmund 1997).

However, they have some limitations. Open-ended questions yield raw data that cannot be easily coded, compared, analyzed and interpreted due to a substantial variety in response (Burns & Bush 1995). This type of questions is less appropriate for mail surveys because respondents may not give a complete answer. They tend to write more briefly than they speak. In addition, illegible handwriting may become a problem (Kinnear & Taylor 1996).

With the above arguments, open-ended questions were kept to a minimum due to their limitations (Zikmund 1997). In this study, they were used at five different places in the questionnaire (Appendix 4.2). Open-ended spaces were provided for respondents firstly to write down answers other than alternative response choices (Q 1.1, Q 1.2, and Q 4.3), secondly to identify the number of athletic footwear that they currently have (Q 1.3), thirdly to identify their most favorite athletic footwear brand (Q 3.7), fourthly to identify family size (Q 4.7), and lastly to give their name, address, or make comments on this survey study at the end of the questionnaire. Only information gained from Q3.7, Q4.3, and Q 4.7 were statistically analyzed.

The second format of measurement is that of *close-ended questions* that provide response options on a questionnaire (Burns & Bush 1995). They require classification of the answer into standardized groupings prior to data collection (Zikmund 1997). Respondents were asked to choose an answer(s) closest to their viewpoint from a list provided with a question (Kinneer & Taylor 1996; Zikmund 1997). There are two types of close-ended questions, multiple choice and dichotomous questions (Burns & Bush 1995). A dichotomous question has two response options, such as yes or no, where a multiple-choice question gives more than two options for the responses (Burns & Bush 1995).

Close-ended questions offer several advantages. Large-scale surveys normally use these types of questions because close-ended questions can be measured more quickly and easily than open-ended questions for both respondents and researchers (Neuman 1997). These scales help reduce interviewer biases associated with data processing because answers from various respondents are easier to code, compare and statistically analyze (Hair et al. 2001; Zikmund 1997). Finally, particularly with self-administered questionnaires, they help increase cooperation of respondents as the questions have a structured-response format that is easy to follow and respond to (Kinneer & Taylor 1996).

Previous research studies (for instance Ailawadi et al. 2001; Mittal 1994) have used closed-ended questions with nominal, ordinal, or ratio scales to collect *demographic* data, such as **gender, employment, education, income** and **family size**, in order to

compare consumer responses to products promoted through sales promotions across these demographic characteristics.

In this study, both dichotomous and multiple choice questions were employed in conjunction with the scales previously discussed, for collecting demographic data. A dichotomous question was used for collecting gender data (Q 4.1). For measuring other *demographic* data, namely: **age; education; employment status; managerial position in the organization; marital status; and monthly family income** (Q4.2, Q4.3, Q4.4, Q4.5, Q4.6, and Q4.8), multiple-choice questions with determinant choice approach were employed due to several alternative response answers being required. For each of these questions, respondents were requested to choose only one response choice from among all alternatives (Zikmund 1997). Table 4.9 summarizes scales and formats of measurement used to measure variables in this study.

However, the use of close-ended questions may lead to certain biases, such as nonexclusive response choices, insufficient response choices and position bias. Table 4.10 summarizes these biases and addresses how these biases were minimized in this study.

**Table 4.9- Scales and types of measurement used to measure demographic data**

Scale used to measure this variable	Type of measurement used to measure this variable	Concepts (variables)
Nominal	Dichotomous question	Gender
Nominal	Multiple-choice question	Marital status, and Employment status
Ordinal	Multiple-choice question	Education, and Position in organization
Ratio	Multiple-choice question	Age, and Monthly family income
Ratio	Open-ended question	Family size
Interval	Likert scale	<i>Psychographics</i> : Price consciousness, Quality consciousness, Value consciousness, Price mavenism, Brand loyalty (loyalty to other athletic footwear brands, not Reebok), Variety seeking, Need for cognition, Innovativeness, Deal proneness, Motivation to conform to expectations of reference groups, Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear, and
Interval	Behavior Intention scale	Purchase intentions

Source: developed for this thesis

**Table 4.10- Possible biases with close-ended questions**

Sources of Biases	Descriptions	To minimize biases
Nonexclusive response choices	There is overlap among categories	<ul style="list-style-type: none"> <li>• Care was taken to ensure that each alternative was mutually exclusive (no overlap among categories)</li> </ul>
Insufficient response choices	Respondents cannot give their answers because a questionnaire does not have appropriate response categories to check	<ul style="list-style-type: none"> <li>• Care was taken to ensure that each of close-ended questions had all possible response choices</li> <li>• All possible alternative choices were slightly modified from those of previous studies, a questionnaire from Super Sports, and suggestions by the exploratory research</li> </ul>
Position bias (especially with multiple-choice questions)	A specific alternative of response choice has a greater chance of being chosen, i.e. the first or middle choice	<ul style="list-style-type: none"> <li>• Emphasize the importance of an accurate response required through the introductory section of the questionnaire</li> </ul>

Source: developed for this thesis from Cooper & Schindler 2001; Kinnear & Taylor 1996; Zikmund 1997

The third format of measurement is *the scaled-response questions*. These involve a scale developed by researchers to measure unobservable variables, such as psychographics and purchase intentions (Burns & Bush 1995). As most of these concepts' properties exist on a continuum ranging from one extreme to another in the mind of respondents, response questions are therefore developed in an assumed interval format (Burns & Bush 1995). This study used *Likert and Behavioral Intention* scales to collect the data regarding *psychographic* and *normative influencing variables*, and **purchase intentions**, which are justified next.

The *Likert scale* is one of the most commonly used scales among marketing researchers to assess consumer opinions (Zikmind 1997) and psychographic variables (Hair et al. 2000). A Likert scale is easy to administer and therefore appropriate for research using self-administered surveys (Hair et al. 2000). It allows for the degree of intensity or feelings to be expressed (Burns & Bush 1995). Other empirical studies, examining similar research issues as this study, have used this scale to measure psychographic and normative influencing variables (for instance Ailawadi et al. 2001; Cho & Kang 1998; Huff & Alden 1998; Lichtenstein & Ridgway 1993; Mittal 1994; Wakefield & Barnes 1996).

In this study, Likert scales were employed to measure all *psychographic* and *normative influencing variables*. Respondents were asked to check how strongly they agreed or disagreed with each relevant statement (Q 3.1 to Q 3.6 and Q 3.8 to Q 3.42).

As reliability of a measurement increases when the number of scale points increases (Churchill 1995), rather than using a narrow point scale, it was determined that a five-point scale ranging from strongly disagree, slightly disagree, neutral, slightly agree and strongly agree was appropriate to be used in this research. In addition, a score (1 to 5) was assigned to alternative responses from strongly disagree to strongly agree respectively, to reflect its degree of attitudinal favorableness. Therefore, scores could be totaled to measure each psychographic variable (Cooper & Schindler 2001). The use of this score descriptor allows data collected to be analyzed using statistical tools (Hair et al. 2000).

To measure **purchase intentions** of the seasonally discounted Reebok athletic footwear, *the behavior intention scale* is appropriate (Hair et al. 2000). Respondents were asked to make a subjective judgment on their likelihood of buying the Reebok athletic footwear promoted through the seasonal price promotion mentioned (Q 2.1). In addition, a percentage equivalent expression was attached to each descriptor to increase the clarity of the scale point descriptors (Hair et al. 2000). The scale descriptors ranged from definitely would not purchase (less than 10% chance), probably would not purchase (10% to 49% chance), not sure, probably would purchase (50% to 89%) and definitely would purchase (90% to 100% chance).

In brief, this section justified levels and formats of measurement being used in this study. Demographic data were measured using close-ended and open-ended questions with nominal, ordinal and ratio scales. Psychographic and purchase intention variables were captured using Likert and Behavior intention scales respectively.

#### **4.8.3 Developing question wording**

Question wording tends to be more of an art than a scientific process, which requires skill, practice, patience and creativity of researchers (Neuman 1997). Question wording is essential since it helps capture the respondents' true answers (Burns & Bush 1995). However, question wording can lead to response errors when the wording of a question influences respondents to answer unreliably or inaccurately (Burns & Bush 1995). A good survey question should help avoid confusion and maintain the respondent's perspective (Neuman 1997).



In developing the questions for this study, a number of suggestions relating to good question design were followed (Burns & Bush 1995; Churchill 1995; Hair et al. 2000; Cooper & Schindler 2001; Kinnear & Taylor 1996; Neuman 1997; Zikmund 1997). A number of principles and justifications of how they are incorporated into questionnaire design are summarized in Table 4.11. By following these principles, the final version of the questionnaire was developed and is presented in Appendix 4.2. These principles help minimize biases from question wording, including Acquiescence, Auspices, Prestige, and Social desirability. These biases are now discussed.

*Acquiescence bias* occurs when respondents accept or reject all statements they are asked about (Zikmund 1997). This can occur in the Likert scale measuring *psychographic variables* in this study. To assess this bias, wording of questions measuring the same psychographic variable are flipped to match agreement with disagreement. In a questionnaire, if answers to questions of the same variable are found to be inconsistent, that question will finally be excluded from the data analysis. In the questionnaire developed, one of the indicators measuring a particular psychographic variable was flipped. For example, four questions (Q 3.1, Q3.11, Q3.19, and Q3.38) were developed to measure the **price consciousness** variable. Q 3.11 was worded in the opposite direction (“I would not willingly spend extra time to find the lowest priced athletic footwear.”), compared to the other three indicators (such as Q 3.1 “3.1. When buying a pair of athletic footwear, I rely heavily on the lowest priced one.”). A respondent who agreed with Q. 3.1, 3.19, and 3.38 should disagree with Q. 3.11. Thus, the Acquiescence bias could be detected, and reduced.

*Auspices bias* exists when respondents are influenced by the organization conducting the survey (Zikmund 1997). Auspices bias was minimized in this study by informing respondents that this research project was part of the researcher’s Doctoral thesis of the University of Southern Queensland, Australia.

*Prestige bias* may exist when a question is associated with a prestigious person or group that leads respondents to answer on the basis of their feelings to the person or group rather than the issues being asked (Neuman 1997). To minimize this bias, questions were developed using neutral words, which were irrelevant to a prestigious person or group, for instance, famous athletes or the Super Sport stores.

**Table 4.11- Principles to follow for designing the wording of questions in this study**

Principles of good question wording	Application to questions in this study
Avoid complexity	<p>Words used in questionnaires would be simple, and understandable to all respondents.</p> <ul style="list-style-type: none"> <li>• Thai words were used for all questions</li> <li>• Variables used in this study tend to be difficult for respondents to understand (i.e. price mavenism, value consciousness, or need for cognition). Terms similar to variables were not used. Words used to measure those variables were carefully determined to make them as closely related to daily language that respondents use in purchasing products as possible.</li> <li>• No questions were worded in double negatives</li> </ul>
Avoid leading or loaded questions that lead to social desirability bias	<p>Words used in each question would not suggest, imply certain answers, or suggest social-desirability answers</p> <ul style="list-style-type: none"> <li>• Care was taken to ensure that only necessary words were used and would not signal any answers to respondents.</li> <li>• Some questions asked about a specific brand (i.e. purchase intention of the seasonally discounted Reebok athletic footwear. Respondents might believe that Reebok was sponsoring the survey, and this belief might in turn cause respondents to give untrue answers. To minimize this bias, respondents were informed that this research project was a part of the researcher's Doctoral thesis of University of Southern Queensland with the educational purpose</li> <li>• Some questions may lead to social-desirability answers (i.e. those about education, price consciousness, attitude, and purchase intention). Using a mail survey may minimize this bias due to unpresence of interviewer. In addition, at the introductory section of the questionnaire, the importance of the true answers was stated. Also, respondents were informed that different answers from others' were a normal case, and their answers were kept in strict confidence.</li> </ul>
Avoid emotional language and prestige bias	<p>Words used in each question would not lead respondents to emotionally react to words, person or group rather than to the issue</p> <ul style="list-style-type: none"> <li>• Use neutral words, and eliminate emotional words</li> <li>• Questions developed did not include words associating with a prestigious person or group.</li> <li>• Emphasize the importance of the true answers, and the educational purpose of the survey.</li> </ul>
Avoid ambiguity	<p>Use clear words with a specific meaning</p> <ul style="list-style-type: none"> <li>• Where possible, words with a single meaning were employed</li> <li>• Use words that have only one pronunciation</li> <li>• Biased words were not used (i.e. superlatives, slang expressions)</li> </ul>
Avoid double-barreled words	<p>Ask one question at a time for one topic</p>
Avoid making assumptions (ask respondents who do not have relevant knowledge)	<p>This tends not to be an issue due to following reasons</p> <ul style="list-style-type: none"> <li>• Questionnaires were delivered to respondents who have purchased athletic footwear. Respondents to certain degree have experienced the issue to be asked. Therefore, questions to be answered should not be beyond respondents' capabilities.</li> <li>• In addition, a questionnaire asked about information the respondents were aware of (their own characteristics i.e. demographics and psychographics).</li> </ul>

**Table 4.11- continued**

Principles of good question wording	Application to questions in this study
Avoid questions that seriously require the respondent's memory	This is not the problem because questions in this study did not make serious demands on respondents' memory.
Avoid implicit alternatives	<p>Make response categories mutually exclusive, exhaustive, and balanced</p> <ul style="list-style-type: none"> <li>• Care was taken to ensure that alternative choices for each close-ended question were not overlapped.</li> <li>• Questions and alternative responses in this study were developed based on those from several previous research studies, the exploratory research, and Super Sports. Therefore, all possible alternatives should be sufficiently covered.</li> <li>• To make response categories balanced especially for interval questions, response alternatives from both negative (i.e. strongly disagree) and positive (i.e. strongly agree) standpoints were equally given for each interval question.</li> </ul>
Avoid estimates	<p>Questions should not require respondents to answer by estimating or making a generalization</p> <ul style="list-style-type: none"> <li>• There are very limited numbers of questions that could lead to this type of bias in this study (i.e. family income). To minimize this bias, respondents were asked to give monthly (not yearly) family income. A more accurate answer would then be collected because respondents were unlikely to make an estimate or generalization.</li> </ul>
Avoid double-barreled questions	The researcher has carefully developed a question to ensure that each question requires a single answer at a time.
Consider the frame of reference (the respondent's viewpoint in responding to questions)	<p>To ensure that respondents answer a question based on their own personal, not on that of athletic footwear consumers in general</p> <ul style="list-style-type: none"> <li>• Use specific wording (i.e. 'You' and 'I') in all questions to remind respondents that answers requested were about their own information.</li> </ul>
Determine the use of multiple questions or one question	For concepts which more than one dimensions are measured, multiple questions were used to measure them (i.e. psychographics)
Stimulate respondents to answer	<p>Ensure that efforts required from respondents for completing the survey are not excessive</p> <ul style="list-style-type: none"> <li>• Use simple words for questioning</li> <li>• Most of questions were close-ended questions that provided alternative choices for respondents. Respondents should be comfortable in answering survey questions</li> </ul>
Avoid false premises	<p>Questions would not begin with a premise with which respondents may disagree or agree</p> <ul style="list-style-type: none"> <li>• Where possible, only a few necessary descriptive words were used at the beginning of each question and a question directly asked for relevant information only</li> </ul>

Source: developed for this thesis from Burns & Bush 1995; Churchill 1995; Hair et al. 2000; Cooper & Schindler 2001; Kinnear & Taylor 1996; Neuman 1997; Zikmund 1997

*Social desirability bias* exists because respondents wish to create a favorable impression (Zikmund 1997). To reduce this bias, the importance of the true answers was stated at the introductory section of this questionnaire. Also, respondents were informed that different answers from others were a normal case and their answers were kept in strict confidence.

#### **4.8.4 Determination of the questionnaire organization**

After the question wording was developed, the questionnaire sequence was then determined. The organization of the set of questions should follow some understandable logic in order to facilitate the questioning process (Burns & Bush 1995). This in turn helps to minimize the discomfort and confusion of respondents (Neuman 1997) and the amount of effort necessary to respond to questions, while maximizing the probability that respondents will give reliable, accurate and complete answers (Ayidiya & McClendon 1990; Burns & Bush 1995).

The sequencing of questions can introduce sequence biases (Kinnear & Taylor 1996; Neuman 1997). For instance, a bias can exist when answers to specific questions affect the more general ones (Zikmund 1997). Additionally, an anchor effect can exist with the psychographic questions when answers to previous psychographic questions, such as **price consciousness**, become a comparison point with which a subsequent psychographic question is evaluated, such as **quality consciousness** (Landon 1971; Zikmund 1997).

To minimize these biases, questions in the questionnaire were ordered using a combination of two approaches, the funnel and the sections approach. The funnel approach suggests that general questions be asked before specific questions (Hair et al. 2000; Kinnear & Taylor 1996; Neuman 1997). Thus, in this questionnaire, respondents were asked to indicate their purchase intention towards the seasonally discounted Reebok athletic footwear prior to questions relating to their psychographic and normative influencing characteristics. As a result, the influences of answers of specific psychographic questions to more general question of purchase intention are unlikely to exist (Zikmund 1997). To reduce the anchor effect, a randomization of psychographic questions on this questionnaire was taken (Landon 1971; Zikmund 1997).

In addition, the sections approach suggests that the researcher should divide information collected into sections based on types of information required to answer each research question and objective (Burns & Bush 1995). This approach helps minimize respondents' confusion because questions on the same topics are grouped together (Neuman 1997). Thus, in this questionnaire, all questions were grouped into key sections based on types of variables (*purchase intentions, psychographic, normative influencing, and demographic characteristics*).

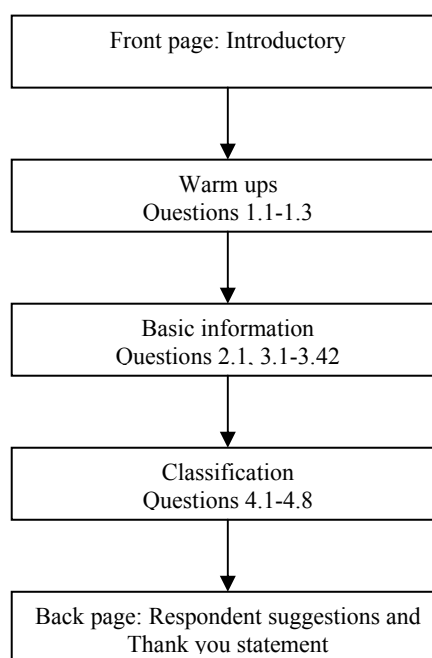
By following these approaches, the flow of questions in the questionnaire was then developed, and is presented in Figure 4.4. There are five sections in the questionnaire (introductory, warm ups, basic information, classification, and thank you statement). A set of questions and sequencing of questions are illustrated in a draft questionnaire (Appendix 4.2).

Firstly, on the front page, the questionnaire started with *a brief introductory section* communicating general instructions prior to asking the first question (Hair et al. 2000). Also, it stated the importance of the true answers, a normal situation if a respondent's answers differ from others', and confidentiality of respondents' information.

Then, '*warm up*' questions were introduced for respondents to answer. Warm up questions should be simple, interesting and unthreatening (Churchill 1995) to make respondents feel that the questions can be answered easily and quickly (Burns & Bush 1995). The questionnaire then can gain respondents' interest and rapport (Kinnear & Taylor 1996) that in turn stimulates respondents to complete the remainder of the questionnaire (Churchill 1995). Question 1.1 to 1.3 in the final version of the questionnaire (Appendix 4.2) were 'warm up' questions asking general opinions about sports activities of respondents. Information gained from this section was not used in the statistical analysis.

Filter questions can be included in the warm up section to help researchers to screen out respondents not qualified to answer other questions (Zikmund 1997). However, filter questions were not used in this questionnaire because questionnaires were mailed to respondents chosen from the identified sampling frame. Selected respondents were likely to have information required, and thus were qualified for this study.

**Figure 4.4**  
**Question sequence**



Source: developed for this thesis

*Basic information section* is the third and most important section. The most complicated, difficult and sensitive to answer questions are placed in this section for two reasons. Firstly, after going through easy questions, respondents would feel committed and be more willing to answer more difficult questions than discontinuing their responses. Secondly, they would see that only a few sections of questions remain to be answered. Once they finish this section, they would be almost finished (Burns & Bush 1995).

Questions regarding **purchase intentions**, and *psychographic* and *normative influencing variables* were placed in this section (Q2.1, and Q3.1 to Q3.42, respectively). Some *psychographic* questions (such as **price consciousness** and **motivation to conform to the expectations of reference groups**) might be sensitive to answer. These questions were hidden among some less sensitive ones to reduce respondents' perception that those questions were sensitive. Therefore, respondents would continue to respond to all questions (Burns & Bush 1995; Churchill 1995).

*Classification section* is the fourth section in the questionnaire. Classification data is collected to classify respondents in order to elicit more information about the phenomenon of interest (Churchill 1995). All *demographic* questions (Q4.1 to Q4.8)

were placed here to reduce a possibility that respondents might break off the survey at the very beginning if these questions were placed at the front (Burns & Bush 1995; Zikmund 1997). On the back page of the questionnaire, spaces were given for respondents to comment on this study. Finally this questionnaire was ended with the *'thank you' statement* (Hair et al. 2000; Neuman 1997).

In addition to the question sequence in the questionnaire, how respondents are communicated to through the questionnaire may also help increase respondents' continuation (Zikmund 1997). Transition phases were used to make question topics flow smoothly, and these would assist respondents' memory and comfort levels (Neuman 1997).

In this questionnaire, transition phases were placed at the beginning of psychographic and demographic sections (part 3 and 4 in the final version of the questionnaire, Appendix 4.2) to introduce new important sections to respondents. Respondents could then clear their mind before thinking about their personal data (Hair et al. 2000). Also transition phases assured respondents that their information was kept confidential (Hair et al. 2000). In addition, skip directions were used to ensure that only specifically qualified respondents answer specific questions (Hair et al. 2000). For instance, if the respondents' answer to the question 4.4 (employment status) indicated that they were a student, unemployed, self-employed (without other employees), retired, or a homemaker, they could skip over question 4.5 (position in the organization) and move to question 4.6.

In brief, this section discussed a flow of questions in the questionnaire used in this study. The funnel and sections approaches were followed to organize the questionnaire structure. General questions were asked prior to specific ones. The questionnaire started with an introductory section, and this was followed by warm ups (general opinions about sports activities of respondents), basic information (purchase intention, psychographic and normative influencing variables), classification (demographic variables), and thank you sections.

#### **4.8.5 Physical characteristics of the questionnaire**

The physical characteristics of the questionnaire are very crucial for a mail survey because there is no interviewer to interact with the respondents (Neuman 1997). The physical characteristics of the questionnaire can affect respondents' acceptance and cooperation to the questionnaire (Churchill 1995; Kinnear & Taylor 1996).

A good questionnaire should look professional, neat, attractive, and be easy to follow (Churchill 1995; Neuman 1997; Zikmund 1997). The following techniques were used in designing characteristics of questionnaire.

**Research topic.** The title of research should be carefully phrased and printed on the questionnaire to attract respondents (Zikmund 1997). For this study, the research topic was bolded, shaded, and appeared on the front page of the questionnaire (Kinnear & Taylor 1996).

**Headings, instructions and questions.** By following the sections approach in sequencing the questions, headings and subtitles were used to identify and distinguish groups of questions on one section from the others. The use of headings helps respondents grasp the scope of questions to be asked (Zikmund 1997). In addition, since various formats of measurement (multiple choice and scaled response questions) were used, appropriate instructions, including transaction statements, were then placed close to the questions to help respondents clearly understand the format of answers and information required before they responded to questions. Giving respondents more detailed information of the type of information sought makes responses unambiguous (Neuman 1997) and this in turn improves responses (Cannell, Oksenberg & Converse 1977; Churchill 1995).

All information in the questionnaire was printed in Thai with a Cordia new typeface. Headings and instructions should differ from questions (Neuman 1997). Thus, questions were printed in 12-point and numbered. Questions were sequenced using numbers in each section (for instance from Q1.1-Q1.3 for warm ups questions and Q2.1 for the purchase intention) to make the number of questions appear fewer than they actually are (Dillman 1978). In addition, numbering questions facilitates handling and promotes respondent cooperation (Churchill 1995) whereas, capital letters were used for headings



that were printed in 14-point size, and were bolded and shaded. Instructions were distinguished from headings by printing them in 12-point size character and in italics. Space was also provided to ensure a decent margin (Zikmund 1997). Each section was separated by double line spaces.

**Response choices.** Key questions in the questionnaire were multiple choices, dichotomous or Likert type questions. Respondents were instructed to put an X in the box most relevant to their answers for multiple choice and dichotomous questions. Single line spacing was employed to distinguish alternative response choices from questions. All response boxes were listed down a page to make questionnaires easier to see (Neuman 1997).

A matrix question format was used for presenting the series of Likert questions. The same response categories were used to save space and to make it easier for respondents to note answers for the same response categories (Neuman 1997). To answer each Likert type questions, respondents were requested to mark (X) in a box along the continuum of the scale developed. An appropriate space was given to separate the scale from questions. On the back page of the questionnaire, multiple line spaces were provided for suggestions respondents might have about this study.

**Length of questionnaire.** Multiple sheets were used due to a number of questions in this questionnaire. We made the questionnaires appear as brief and small as possible by printing them on both sides of A3 paper, folding and stapling them to form a booklet format (Zikmund 1997). This format not only facilitates handling but also helps reinforce an image of quality (Churchill 1995).

Smaller questionnaires are better than larger ones because they seem easier and appear to take less time to complete. However, they should not appear crowded (Churchill 1995). A short mail questionnaire (three to four pages) is appropriate for the general population (Neuman 1997). These suggestions were also taken into account in developing the final questionnaire for this study.

**Other key issues.** The front page of the questionnaire is the place for information aimed to stimulate respondents' cooperation (Sekaran 2000). Therefore, in addition to the

research topic, this page consisted of key messages emphasizing a confidence of the survey, the purpose of this study, the sponsoring organization, graphic photos of a free incentive. The back page was reserved for the respondents' suggestions for the study and a thank you statement. The questionnaires were printed, not mimeographed or copied, on a good quality paper to emphasize the importance of the survey (Churchill 1995).

In brief, this section discussed key issues necessary to be concerned for developing physical characteristics of this questionnaire. These key issues included research topic, heading, instructions, questions, response choices and length of questionnaire. Care was taken to ensure that this final questionnaire had good and professional physical characteristics to increase respondents' cooperation.

#### **4.8.6 Pre-coding the questionnaire**

Pre-coding is a process of placement numbers on the questionnaire to facilitate data entry and to turn information from the questionnaires into a format that a computer can read (Burns & Bush 1995; Hair et al. 2000; Neuman 1997). Pre-coding should be done prior to actual data collection (Kinnear & Taylor 1996).

In this study, questions to be pre-coded were multiple choice, dichotomous, Likert and behavior intention questions. For multiple choice and dichotomous questions, numbers were placed alongside each response in parentheses. With Likert scaled and behavior intention questions, numbers were used as the response categories, as described in section 4.8.2. Therefore, there is no need to use pre-coding for these questions.

In summary, questionnaire design is an essential process in survey research because it translates research questions into specific questions that can be asked of the respondents (Burns & Bush 1995). The process involved six key steps, namely: sources of non-sampling error; determination of scales and formats of measurement; developing question wording; determination of the questionnaire organization; determination of physical characteristics; and pre-coding the questionnaire. Through this process, a quality questionnaire for this study was developed. This questionnaire would enable the researcher to encourage respondents to provide adequate and true responses that were used to answer predetermined research questions (Hair et al. 2000).

## **4.9 Survey administration**

Steps taken to develop the questionnaire used in this study have been justified in the previous section, the discussion now moves to strategies to administer the mail survey in order to achieve a high response rate. Mail surveys have several advantages, such as a low cost, and the ability to collect a large amount of information, as discussed in section 4.4. However, in relation to the administration stage they encounter a key limitation, namely: non-response error (Burns & Bush 1995; Cooper & Schindler 2001; Zikmund 1997). The following discussions involve three parts including non-response error, strategies to increase response rate, and non-response error assessment.

### **4.9.1 Non-response error**

Non-response error exists when there are statistical differences between a survey that includes only respondents who return questionnaires and a survey that also includes those who do not (Churchill 1995; Zikmund 1997). Non-response errors may increase when the response rate decreases, which can invalidate research findings (Kinneer & Taylor 1996). Non-response problems in mail surveys can be caused by respondents' refusals to participate in the survey, break offs during the survey, refusals to answer some questions (Burns & Bush 1995; Churchill 1995), and incorrect mailing address (Hair et al. 2000).

Mail surveys conducted by experienced researchers or the Advertising Research Foundation should achieve response rates of 50 or 80 percent, respectively (Kinneer & Taylor 1996). Nevertheless, in practice, most mail surveys are substantially below this rate (Kinneer & Taylor 1996). A response rate normally achieved is between 10 to 50 percent (Neuman 1997). Typically, mail surveys targeted to households achieve a response rate of less than 20 percent (Burns & Bush 1995). For this study, the researcher forecasted the response rate by averaging the normal response rates suggested by Neuman (1997), and determined that 30 percent response was an acceptable response rate. This rate is consistent with that suggested by other researchers, such as Cooper and Schindler (2001). The non-response error also leads to a subsequent problem, that is self-selection, which refers to a bias existing when the respondents and non-respondents differ in their characteristics, such as involvement in athletic footwear products (Burns & Bush 1995).

To achieve an acceptable response rate and minimize the self-selection problem, the total design method and other strategies suggested by a number of researchers, were followed (Burns & Bush 1995; Churchill 1995; Cooper & Schindler 2001; Hair et al. 2000; Kinnear & Taylor 1996; Neuman 1997; Zikmund 1997). These strategies are discussed in turn.

#### **4.9.2 Strategies to increase response rate**

The total design method was developed by Dillman (1978) to improve mail and telephone surveys. This method views a survey as a social interaction in which respondents act on the basis of what they expect to gain in exchange for their response (Dillman 1978; Neuman 1997). It suggests three key strategies to enhance the response rate. These include providing rewards, minimizing respondents' costs, and building trust (Dillman 1978).

*Providing rewards.* Monetary rewards can tremendously increase the response rate (Cooper & Taylor 2001). Alternatively, rewards can be non-monetary premiums as well (Hair et al. 2000). It was decided to give respondents a pair of athletic socks in exchange for their cooperation because, with the same amount of incentive budget, this non-monetary incentive was likely to provide more utilitarian and hedonic values than monetary rewards. Respondents might value monetary incentives based on the amount of money being received. On the other hand, they might value athletic socks based on the retail price of this product. As a result, athletic socks were likely to be more attractive than monetary incentives. The image of athletic socks was printed on the front of this questionnaire. Other rewards involved good and attractive physical characteristics, questionnaire structure and wordings (Burns & Bush 1995; Kinnear & Taylor 1996; Neuman 1997), which have been discussed in the previous section.

*Minimizing respondents' costs.* The questionnaire used in this study was short and easy to answer. Questionnaire length was kept as minimal as possible (not over five pages). Instructions and transition phases were appropriately placed in the questionnaire to give respondents a clear direction to follow. Postage-paid, addressed return envelopes were provided with mailed questionnaires for simplifying questionnaire return.

*Building trust with respondents.* Confidentiality was assured through the cover letter. In addition, the university was addressed as the sponsor of this study. These have made this study appear legitimate and this in turn helps to increase response rate (Neuman 1997).

There are other key strategies used in this research to improve response rate. They include the use of *cover letter and follow-ups*. These strategies are discussed next.

*Cover letter.* Cover letter is a separate letter sent with the questionnaire to prospective respondents. It is an opening statement aiming to verbally introduce, explain the nature and emphasize the importance of the research. It helps enhance respondents' cooperation and willingness to complete as well as return the questionnaire within a specified timeframe (Burns & Bush 1995; Churchill 1995; Hair et al. 2000). A cover letter for this study was developed, and is presented in Appendix 4.1, based on following guidelines:

- It communicates directly to prospective respondents by addressing the cover letter to each of the selected respondents;
- The cover letter is typed on the university's letterhead to represent the researcher's organization affiliation;
- It informs respondents of the educational purpose of this study that is sponsored by the researcher's university;
- It describes the nature and the topic of this survey and emphasizes its importance;
- It guarantees confidentiality of prospective respondents' information;
- It explains how respondents are chosen, and reinforces the importance of the respondents' participation, and honest responses;
- It states the overall time frame required to complete the questionnaire, and address the incentive that is offered
- It acknowledges how a survey can be forgotten;
- It identifies the completion date, where and how to return the questionnaire;
- It offers to send a copy of the report to those who may request; and
- It ends with how to contact the researcher if respondents have any questions, and an advance thank-you statement (Burns & Bush 1995; Churchill 1995; Hair et al. 2000; Neuman 1997; Zikmund 1997).

*Follow-ups.* After sending the questionnaire, to increase response rate, researchers can remind respondents to complete and return the questionnaire using successive follow-up

letters (Cooper & Schindler 2001; Zikmund 1997). Following are steps of follow-ups, adapted from researchers' (Cooper & Schindler 2001; Kinnear & Taylor 1996) that were taken in this study to enhance response rate. Cover letters for follow-ups appear in Appendix 4.1.1 to 4.1.2.

- Initial questionnaires with a cover letter were mailed to all prospective respondents
- In addition to giving the requested data in the questionnaire, respondents were also asked to give their contact details in the questionnaire returned to the researcher. Therefore, the researcher was able to track who has responded to this research project and who did not. Ten days after the first mailing, the first follow up letter was sent to all respondents to thank those who returned questionnaires and remind those who did not.
- Twenty days after the first mailing, a similar follow up letter was sent to non-respondents with a new questionnaire.

Follow-up mails should not disturb respondents who have already returned the questionnaire (Zikmund 1997). The researcher marked respondents who have already replied. Therefore, only non-respondents were sent the second follow-up letter.

#### **4.9.3 Non-response error assessment**

Strategies previously discussed can help maximize the potential response rate for this study. However, researchers need to determine whether the non-respondent group differs from the respondent group (Kinnear & Taylor 1996; Zikmund 1997).

A difference of the non-respondent and respondent groups can be measured by comparing responses of respondents and non-respondents (Churchill 1995). However, when non-respondent characteristics are unknown, such as when using mail surveys, a trend projection can be conducted to measure a non-response error (Churchill 1995; Kinnear & Taylor 1996). This method is based on an assumption that respondents who return questionnaires late (during the follow-up process) will more resemble those who refuse as opposed to early respondents (Armstrong & Overton 1977). The data from late returns will be compared with the early ones to determine whether any significant differences exist (Churchill 1995; Kinnear & Taylor 1996). Trend projection is valuable for detecting non-response error in mail surveys because identifying those responding to the first mailing and successive follow-ups is easy (Churchill 1995).

Trend projections were used in this study to examine non-response error by comparing demographic and psychographic characteristics of the early respondent group to that of the successive follow up respondent groups. Significant differences between these two respondent groups, if they existed, indicate the degree of the non-response problem for this research. Specific statistical tools used for this assessment will be discussed in section 4.11.

In summary, this section discussed non-response problems in mail surveys. Non-response errors could be caused by respondents' refusals to participate in the survey, break offs during the survey, refusals to answer some questions (Burns & Bush 1995; Churchill 1995), and inaccurate mailing address (Hair et al. 2000). Strategies to maximize response rate were then proposed. Thus, trend projections were employed to assess the non-response error (Churchill 1995; Kinnear & Taylor 1996).

#### **4.10 Pretest**

The questionnaire for this study has been developed based on a number of strategies discussed in previous sections. Questionnaires are now available for a pretest. A pretest is conducted to evaluate and improve this questionnaire in aspects of wording, organization, and physical characteristics. It involves a survey to small samples similar to targeted respondents (Burns & Bush 1995; Hair et al. 2000; Zikmund 1997).

In this research, the questionnaire developed was pretested using personal interviews. These interviews were conducted with two groups of respondents similar to those who were used in the mail survey (Hair et al. 2000). They were Thai consumers who have purchased athletic footwear from athletic footwear outlets in Thailand. As statistical sampling is not necessary for these interviews, these respondents were selected on a convenience basis (Zikmund 1997). Respondents were given this questionnaire, and completed it. In addition, they were requested to comment on those underlining aspects to determine any difficulties they might have in understanding and completing this questionnaire. Major comments on any issues were taken into account for further questionnaire modifications. (Churchill 1995; Cooper & Schindler 2001; Hair et al. 2000; Zikmund 1997).

The first round personal interviews were conducted with ten respondents. Major comments were about flipped indicators. Eight respondents felt that flipped indicators of all *psychographic variables*, except **brand loyalty**, and **attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**, were annoying, and were difficult to understand. To reduce this problem, these flipped indicators were reversed to neutral sentences. For example, in Q 3.11 “I would *not* willingly spend extra time to find the lowest priced athletic footwear.” was flipped to “I would willingly spend extra time to find the lowest priced athletic footwear.” Then this revised questionnaire was re-pretested with another ten respondents. These respondents made no major comments on any issues of wording, organization, and physical characteristics of this questionnaire, confirming the suitability of the questionnaire. Therefore, the final version of this questionnaire (Appendix 4.2) was used for the second stage of this research project.

In summary, personal interviews were conducted with two groups of respondents to pretest this questionnaire prior to a launch of the actual survey. The key objective of these interviews was to check the effectiveness of the questionnaire for this study. All key suggestions from respondents were taken into account to improve this questionnaire.

#### **4.11 Data analysis procedures**

After collecting data, the researcher prepared data gathered from the survey, for the analysis section. This section discusses three key steps of data preparation and analysis. These include analysis of respondents, data preparation, and data analysis. These steps are summarized in Figure 4.5.

##### **4.11.1 Analysis of respondents**

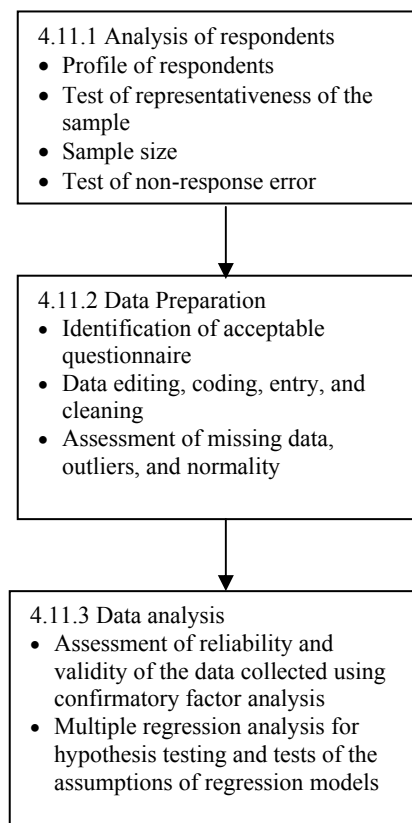
In this section, characteristics of respondents will be explored to gain a primary understanding of the data collected. Frequency distributions will be used for demographic variables, and psychographic and normative influencing variables and purchase intentions will be explored using means and standard deviations. Then the representativeness of the sample will be assessed using both graphic displays and Chi-square statistics. These tests will be done to compare the demographic profile of the sample to that of the population on the specific demographic variables available from the



database of Super Sports. These demographic variables include gender, marital status, and education.

Next, *the achieved sample size* will be determined whether it is appropriate for conducting factor analysis and multiple regression analysis. And lastly, non-response error will be detected using trend projections. This technique will be used to test the difference between response and non-response groups, as previously discussed in section 4.9.3. Chi-Square Test will be adopted to detect non-response error for normal and ordinal questions, whilst Mann\_Whitney U Test for Likert and ratio questions.

**Figure 4.5**  
**Data preparation and analysis**



Source: developed for this thesis

#### **4.11.2 Data Preparation**

Collected data have to be prepared to ensure that the accuracy of the data and their conversion from raw form to classified forms are appropriate for the analysis section (Cooper & Schindler 2001; Hair et al. 2000). These tasks include data cleaning, data

screening, and the assessment of missing data, outliers, and normality. These data preparation tasks are now discussed.

*To clean and screen the collected data*, returned questionnaires will be examined for determining whether they will be acceptable for being used in this study. When questionnaires are returned they will be dated, in order that a comparison of early and late responses can be made. Unacceptable questionnaires will be those returned after the cutoff date, and those with more than 30 % of the questionnaire left unanswered (Hair et al. 1998; Kinnear & Taylor 1996).

The next task is that of *editing*. Questionnaires will be further checked for errors, omissions, or any mistakes (Cooper & Schindler 2001), to ensure that collected data are accurate, complete, unambiguous, consistent with other information, and arranged to simplify coding (Cooper & Emory 1995; Kinnear & Taylor 1996). Non-response questions will be marked as missing data.

After editing the data, the researcher then entered the *coding stage*. Questionnaires were precoded, as previously discussed in section 4.8.6. At this stage, the code '9' will be assigned for missing values. Dummy variables will be used to transform non-interval and non-ratio demographic data into an acceptable format that can be analyzed in the multivariate analysis section (Hair et al. 2000). The data to be transformed are the nominal *demographic variables*, which include **gender**, **employment status**, and **marital status**. How these demographic variables are transformed will be further detailed in chapter 5.

Next, data coded will be inputted into a format that allows data to be analyzed. To ensure that data are inputted correctly, a frequency distribution on each of the key questions will be run to check the accuracy of the data entered and to identify any extreme cases (McPhail 1999). Then, every tenth record will be spot checked to ensure accuracy. Any errors detected will then be corrected (McPhail 1999).

Next, collected data will be assessed for missing data, outliers, and normality. *Missing data* exists from two sources, respondents, and other sources in the research process (Hair et al. 1998). In this study, missing data could exist during the data preparation

stage. Strategies to detect and minimize these mistakes were already discussed in the previous section. Missing data from respondents will be coded and left as missing for the analysis.

The next task is to assess *outliers*. Outliers are observations distinctly different from the other observations (Hair et al. 1998). Boxplot analysis will be used to assess outliers. Only outliers, distinctively unique from others will finally be eliminated and recoded as missing.

Collected data will be then ready to be tested on *normality*. Collected data will be tested using Skewness and kurtosis statistics to primarily see whether they are generally normal or not. Non-normal data will not be remedied at this primary step and it will be assessed in greater detail in the regression analysis section. Next, the discussion moves to strategies for the data analysis.

#### **4.11.3 Data analysis**

There are two key analytical tasks to be performed after the data preparation stage for this research. They include the assessment of quality of the measurement and the test of hypotheses proposed. These analyses are discussed below.

**Assessment of the quality of measurement.** In this section, validity and reliability of the collected data will be examined using two statistical tools, namely: factor analysis and calculated values of Cronbach alpha. These analyses enable the researcher to detect, identify, and delete poor indicators for purifying the measurement. This measurement purification in turn result in improving validity and reliability of the questionnaire (Hair et al. 1998). Purified data will then be combined into an appropriate form for the regression analysis using factor scores through principle components analysis. These techniques will further be discussed in chapter 5.

**Hypothesis testing.** The analysis tools used to test hypotheses developed is the key issue in this section. Hypotheses developed in this study have been based on following research objectives.

- To identify key consumer characteristic factors that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear;
- To determine in more details how the consumer characteristics impact consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

A number of criteria need to be considered when selecting the appropriate statistical test of association. These criteria are number of dependent variables, number of independent variables and a level of measurement for both dependent and independent variables (Hair et al. 1998; Zikmund 1997). This study has aimed to investigate the influence of a number of independent demographic, psychographic and normative influencing variables (19 independent variables) on the single dependent variable (purchase intentions). All independent psychographic and normative influencing variables and the dependent variable are interval data. Most of the demographic variables are either nominal or ordinal data, which will be transformed to be dummy variables. In addition, this research has attempted to test the relationship between antecedent consumer characteristic variables in addition to the influence of these antecedent variables on the purchase intention variable.

To achieve the research objectives addressed above, multiple regression estimations or structural equation models are alternative techniques that could be adopted for analyzing the data to be collected in this research (Hair et al. 1998). Multiple regression analysis can be used to examine the relationship between a single dependent variable and several independent variables (Hair et al. 1998). However, this technique is restricted to examining a single relationship at a time (Dielman 2001). Structural equation models are more appropriate to be used than regression models for analyzing the complicated relationships of variables (Hair et al. 1998). This technique can be used to examine a series of dependence relationships simultaneously (Cheng 2001). However, a key limitation of this analytical technique is that an interpretation of statistical results may become too difficult if the research model to be tested consists of many unexpected relationships and/or includes a large number of variables, for instance more than 20 variables (Cheng 2001; Hair et al. 1998).

As a large number of variables (20 independent and dependent variables) will be measured in this research, and as all of the proposed relationships (hypotheses) are not

complicated and they will be tested one at a time, it was deemed appropriate to use multiple regression estimations for testing the proposed hypotheses (Cheng 2001; Dielman 2001; Hair et al. 1998).

To test multiple regression models, it is necessary to assess whether the collected data violate the key assumptions of regression models because any assumption violations can result in distorted and biased research results (Dielman 2001; Hair et al. 1998). These assumptions include *linearity*, *homoscedasticity*, *normality*, *multicollinearity*, and *independence of the error terms* (Dielman 2001; Hair et al. 1998). However, only the first four assumptions will be tested for each of the proposed hypotheses. The assumption regarding independence of the error terms was not considered to be relevant and it would not be tested in this thesis because this research has not used time series data (Dielman 2001) or sequencing variables (Hair et al. 1998).

Standardized residual plots and normal probability plots will be employed to detect the assumption violations of linearity, homoscedasticity, and normality respectively. Violation of these assumptions could be remedied by transforming the data (Hair et al. 1998).

Multicollinearity will be a problem when two or more of the independent variables are highly correlated, resulting in difficulty in estimating a relationship of variables in a multiple regression analysis (Cooper & Schindler 2001; Hair et al. 1998). In this study, multicollinearity will be checked using tolerance values, and values of variance inflation factor (Dielman 2001; Hair et al. 1998).

Several data transformation techniques can be used for remedying violations. The selection of an appropriate data transformation technique will be justified in more detail in chapter 5 if the above assumptions are seriously violated.

In summary, data preparation and data analysis are the focus of this section. Data will be prepared to ensure that the accuracy of the data and the conversion from raw form to classified forms are appropriate for the analysis section (Cooper & Schindler 2001; Hair et al. 2000). This section proposed strategies to analyze characteristics of respondents, to test representativeness of the sample, to determine the appropriateness of the achieved

sample size, and to assess non-response error. The discussion then focused on data preparation techniques including data cleaning, data screening, and the assessment of missing data, outliers, and normality. Next, justifications of the use of factor analysis to purify the measurements and to combine purified data were given. Finally, the appropriateness of the use of the multiple regression analysis to test the proposed hypotheses and methods to test the key assumptions of regression models were justified.

#### **4.12 Limitations**

The most important concern for this study is to ensure that the research results can be generalized to population. This study aims to investigate consumer characteristics that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. As a census cannot be conducted due to the budget and time constraints, this study will be conducted using a sampling method, which becomes a source of limitation for this study.

Research on a sampling basis requires a sampling frame to be identified for a sample selection. Sampling frame used in this study was the list of members of Super Sports who have purchased athletic footwear from this store. Members of Super Sports might not be completely representing the population, Thai consumers who have purchased athletic footwear in the Thai market. Therefore, generalization of the findings of this study to the whole athletic footwear consumers might be limited.

Limitations of this study also stem from other sources. For example, this study has been descriptive in nature that examined the actual phenomenon. Another possible alternative explanation from other variables might not be completely ruled out since all variables were not manipulated as done in explanatory research.

Finally, this research will be conducted during the economic fluctuation period. Whether the economic crisis affects how consumers respond to products promoted through discounting programs is not examined. The research result may vary should the study be conducted at other time.

#### **4.13 Ethical considerations**

Ethics provide guidance of what behaviors are appropriate under a certain situation (Hair et al. 2000; Neuman 1997). In the research area, ethics focus on what researchers do to increase the likelihood that they will make ethical decisions in developing a research process (Hair et al. 2000). Researchers have to judge what activities are inappropriate and what activities must be undertaken to ensure that no one will suffer from research activities (Cooper & Schindler 2001; Kinnear & Taylor 1996). Researchers are required to balance the value of advancing knowledge against the value of noninterference in the lives of others (Neuman 1997).

Ethical treatment of respondents is the most important ethical issue in this study. In designing the research process of this study, care was taken to ensure that respondent rights were not violated.

*The right to privacy.* Respondents have no obligation to cooperate in a survey (Kinnear & Taylor 1996). They are not forced to participate in a study (Leary 1995). They have the right to refuse to be interviewed, or to refuse to answer any questions in a survey (Cooper & Taylor 2001). Because this study was a mail survey, therefore, respondents were free to determine whether they wanted to participate in this study. Once they decided to give their information, they could exit the survey at any time.

Privacy also includes the right respondents have to assure that their information on a survey will not be made public (Cooper & Taylor 2001; Furlong et al. 2000; Leary 1995; Neuman 1997). Although this study required respondents to identify themselves and to give their contact details in the questionnaire for the purposes of implementing the follow up procedures, and of sending free gifts (athletic socks) to respondents in exchange for their cooperation, information used for the analysis or released to public was based on aggregated research findings. Identifying information was not given to anyone not relating to this study, and was not used for other than research purposes. In terms of data accessibility, the researcher was the only one who could access a respondent's information. Therefore, respondent information was kept strictly confidential.

*The right to be informed.* Prospective respondents must be given enough information about the nature of a study to decide whether they want to participate before a study begins (Furlong et al. 2000; Hair et al. 2000; Leary 1995). A cover letter was used to provide necessary information about the mail survey to all respondent samples, for example, purposes of the survey, information required from respondents, incentive provided, and a sponsor of this survey. In addition, a contact number of the researcher was provided to respondents who might require further information before making their decision to participate. Thus, for this research, prospective respondents received sufficient information for determining their participation.

Deception is an issue interrelated with the respondents' right to be informed (Zikmund 1997). Deception becomes a problem when researchers have no opportunity to straightforwardly ask about the information required. They have to disguise the purpose of the research or use covert research methods, which might later cause any suffering to respondents (Neuman 1997; Zikmund 1997). As respondents in this study were straightforwardly informed about the research purposes, deception was not the issue.

*The right to safety.* Respondents should not face serious mental suffering, embarrassment, or discomfort in participating in a survey (Churchill 1995; Leary 1995). Care was taken to ensure that respondent suffering or embarrassment was minimized or eliminated. Some questions in this study asked about sensitive information, such as income, education, and price consciousness. Respondents were informed that their different answers from that of the others were normal. Instructions and sequence of the sensitive questions were carefully constructed to help respondents go through questionnaires with minimum embarrassment.

Ethics in research also involve other issues for researchers. For instance, the researcher should maintain high standards to ensure that the data is accurate (Zikmund 1997). Through the whole research process, appropriate scientific methods should be used. Possible errors should be detected and eliminated or reduced. The researcher should not manipulate data. Data should be honestly collected, analyzed and interpreted (Hair et al. 2000). Finally, the researcher should present true research findings (Kinnear & Taylor 1996). These suggestions have been strictly followed in this research.



In summary, ethics must be seriously concerned through the whole research process. Respondents have the right to privacy, safety, and to be informed. The researcher ensured that high-standard research tasks were maintained in this study. Data were honestly collected, analyzed, and presented. By following these suggestions, ethics in research have not been violated.

#### **4.14 Conclusions**

This chapter described the research methodology employed in this study. Justifications of the selection of the descriptive research design with the mail survey approach were given. The sample selection process was addressed and the measurement process was then developed. The questionnaire development process and steps of survey administration were justified. Steps of the pretest of the questionnaire used in this research were proposed. This was followed by the discussion in relation to data preparation and analysis. Key limitations of this study were addressed. Finally, the ethical issues relevant to the research process were discussed.

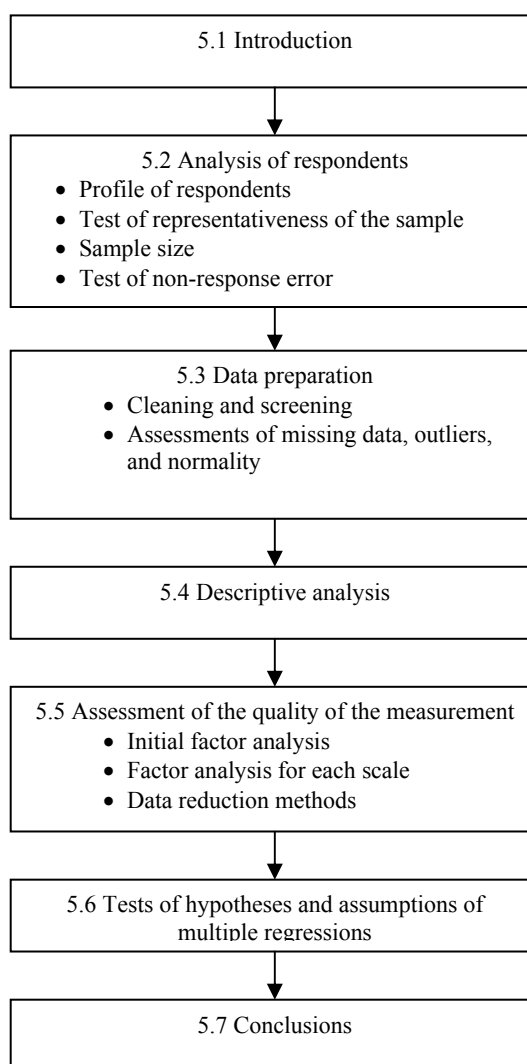
## CHAPTER 5

### Data Analysis

#### 5.1 Introduction

The methodology to gather data for this survey research has been described in the previous chapter. In this chapter, the data collected are analyzed. This chapter consists of eight sections, as shown in Figure 5.1, commencing with analysis of respondents in section 5.2. The data preparation strategies are discussed next in section 5.3. This is followed by the descriptive analysis of the data gathered in section 5.4. Next, the quality of the measurement used in this study is examined using factor analysis in section 5.5. The proposed hypotheses and the assumptions inherent to multiple regressions are then tested in section 5.6. Finally, conclusions are drawn in section 5.7.

**Figure 5.1**  
**Outline of chapter 5**



Source: Developed for this thesis

## **5.2 Analysis of respondents**

In this section, *demographic characteristics* of respondents are summarized (section 5.2.1). The samples are assessed to determine if they represent the population in section 5.2.2. The appropriateness of the achieved sample size is discussed in section 5.2.3. Non-response error is then examined in section 5.2.4.

### **5.2.1 Characteristics of respondents**

This section describes *demographic characteristics* of the respondents, which are summarized in Table 5.1. The first column of this table identifies demographic variables investigated in this research and groups used to categorize respondents for each of these variables. The second and third columns show the proportion of respondents in each group in quantity and percentage formats respectively.

From this table, it can be seen that most respondents are males (56.7%), are between 21-40 years of age (62.1%), and have a Bachelor's degree (53.3%). In relation to employment status, most are fulltime employees (47.5%) or are self-employed with their own employees (21.0%). For the respondents who are employed, there is a fairly even distribution across all groups of managerial positions or levels.

Regarding marital status, the respondents are divided almost equally between two groups, namely: single (51.2%); and married (45.5%). The family size of most respondents ranges between three to five persons (66.3%), while monthly family income of the two major respondent groups are 10,000-30,000 Baht (29.7%) and, 30,001-50,000 Baht (22.9%) respectively.

**Table 5.1- Profile of respondents**

Demographic characteristic	Number	Percentage
Gender	(n= 541)	(100)
Male	307	56.7
Female	234	43.3
Age	(n= 541)	(100)
Under 11	0	0.0
11-20	62	11.5
21-30	147	27.2
31-40	189	34.9
41-50	109	20.1
51 and above	34	6.3
Education	(n= 540)	(100)
Lower than secondary school	13	2.4
Secondary school or equivalent	115	21.3
College or equivalent	52	9.6
Bachelor degree	288	53.3
Master degree	68	12.6
Doctoral degree	4	0.8
Employment status	(n= 524)	(100)
Student	92	17.6
Unemployed	2	0.4
Part time employed	9	1.7
Fulltime employed	249	47.5
Self-employed and without your own employees	39	7.4
Self-employed and with your own employees	110	21.0
Homemaker	15	2.9
Retired	8	1.5
Managerial position in the organization	(n= 389)	(100)
Top management	94	24.1
Middle management	98	25.2
Junior management	82	21.1
Non-management	115	29.6
Marital status	(n= 541)	(100)
Single	277	51.2
Married	246	45.5
Divorced or separated	17	3.1
Widow or widower	1	0.2
Family size	(n= 534)	(100)
1	47	8.8
2	47	8.8
3	91	17.0
4	160	30.0
5	103	19.3
6	39	7.3
7	17	3.2
8	18	3.4
9	5	0.9
10	7	1.3
Monthly family income (Baht)	(n= 536)	(100)
Under 10,000	30	5.6
10,000-30,000	159	29.7
30,001- 50,000	123	22.9
50,001-70,000	71	13.3
70,001- 90,000	34	6.3
90,001 and over	119	22.2

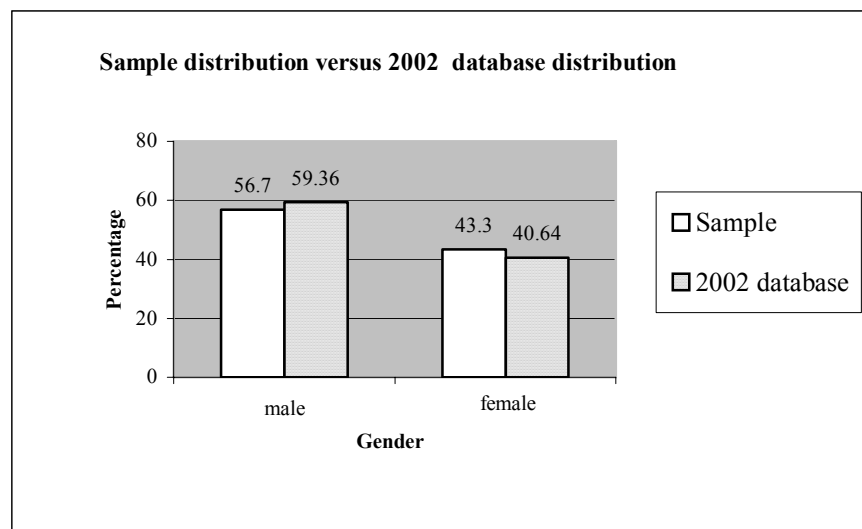
Source: Analysis of survey data collected for this thesis

### 5.2.2 Assessment of the representativeness of the sample

To determine whether this sample is representative of the target population, graphical displays and statistical analysis were adopted to compare demographic data of the respondents to that of the sampling frame (the 2002 Super Sports database). These comparisons were made, in particular, in relation to *demographic variables*, which were available in this database. These variables include **gender, marital status, and education.**

**Gender.** The data indicates that this sample has a higher number of males (56.7%) than females (43.3%), and the 2002 Super Sports database also has similar distribution, as shown in Figure 5.2. This indicates that the gender mix in this sample appears to approximate the sampling frame (the 2002 Super Sports database).

**Figure 5.2- Gender distribution of the sample versus the 2002 database.**

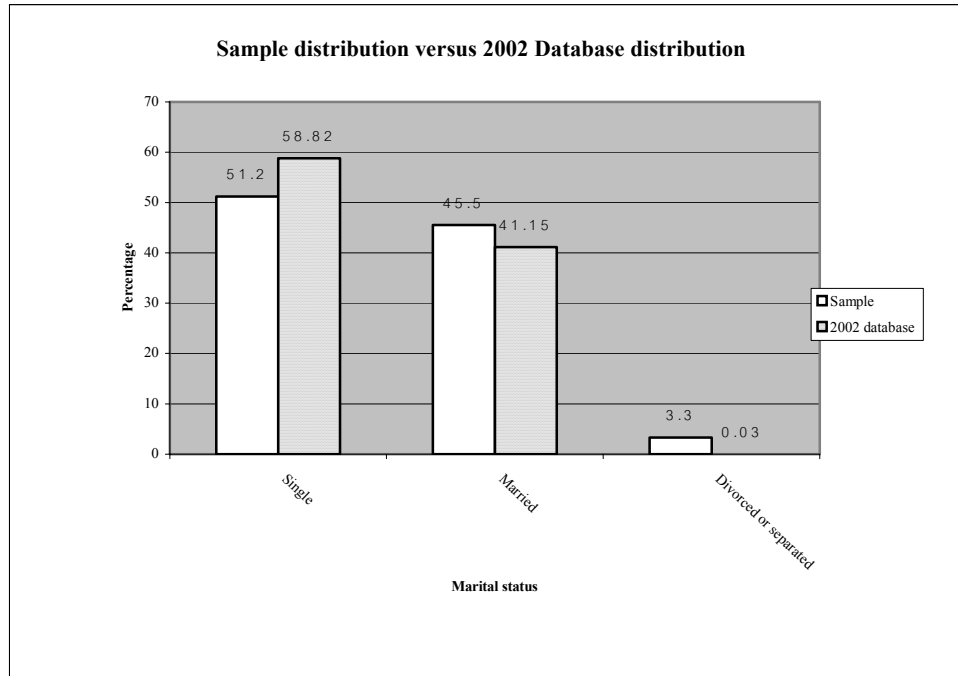


Source: Developed for this thesis and 2002 Super Sports database

**Marital status.** The second variable on which the sample representativeness was assessed is marital status. The trends in the data indicate similarities between this sample and the 2002 Super Sports database, as shown in Figure 5.3. The largest proportion of both the sample respondents (51.2%) and the 2002 Super Sports database (58.82%) are singles, followed by married people (45.5 percent of the sample, compared to 41.15 percent found in the 2002 Super Sports database). There are a small proportion of those who are divorced or separated in both this sample (3.3%) and the 2002 Super Sports

database (0.03%). It can be seen that the respondent's marital status profile in this sample approximates the sampling frame (the 2002 Super Sports database).

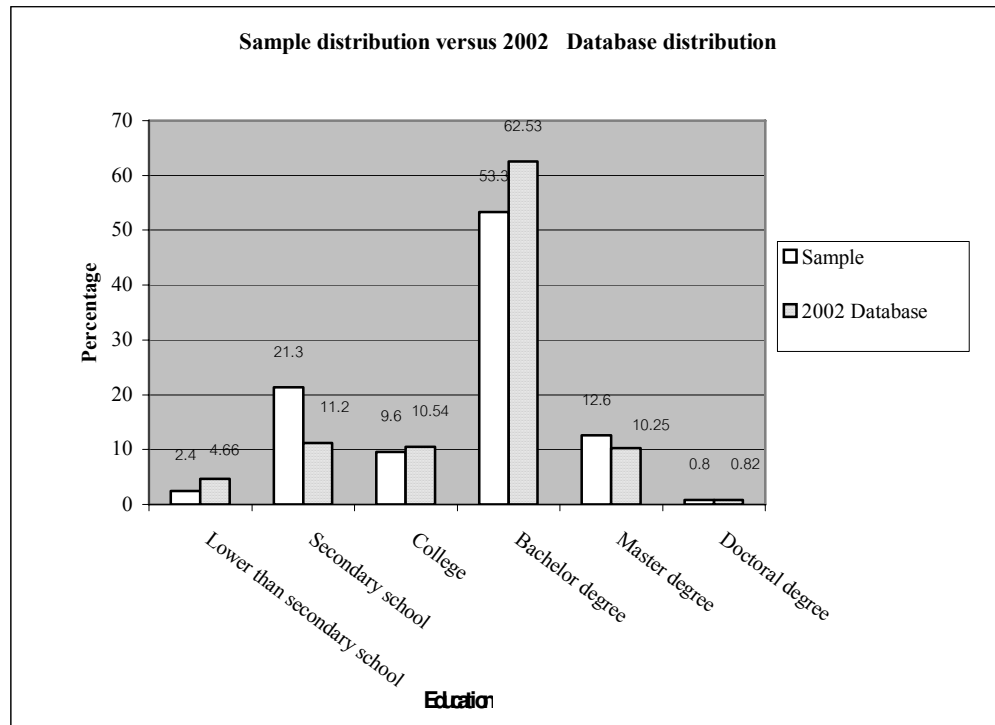
**Figure 5.3- Marital status distribution of the sample versus the 2002 database**



Source: Developed for this thesis and the 2002 Super Sports database

**Education.** The final comparison was made on the educational level of respondents in order to determine whether the sample was representative of the 2002 Super Sports database. The largest proportion of this sample and of the 2002 Super Sports database is those who have earned a Bachelor's degree, as illustrated in Figure 5.4. The next largest group of both this sample and the 2002 Super Sports database are those who have only graduated from secondary school. However, there is a variation in the two groups in relation to this variable, with proportionally less of those in this sample having a Bachelor's degree and proportionally more of them have a high school diploma than is seen in the 2002 Super Sports database. Possible explanations for this difference may be that respondents with a secondary school diploma may be more influenced by the free gift (athletic socks) given to them in exchange for their cooperation, or they may be more interested in this research topic than the others, specifically those with a Bachelor degree. Therefore, responses from the respondents with a secondary school diploma were proportionally over than that suggested by the 2002 Super Sports database, and thus may bias the results slightly. Other than this, the respondent's educational profile of this sample seems typical of the educational profile of the 2002 Super Sports database.

**Figure 5.4- Education distribution of the sample versus the 2002 database**



Source: Developed for this thesis and the 2002 Super Sports database

In addition to the above graphical comparisons, a chi-square goodness of fit test was employed to examine the statistical difference between this sample and the sampling frame on these *three demographic variables*. The results of these tests are summarized in Appendix 5.1.

From Appendix 5.1, the chi-square analyses indicated no significant difference between this sample and the sampling frame in relation to **gender** ( $\chi^2 = 1.532$ ,  $df= 1$ ,  $p= 0.216$ ), but that there were significant differences in both **marital status** ( $\chi^2 = 1537.137$ ,  $df= 2$ ,  $p= 0.000$ ) and **education** ( $\chi^2 = 65.835$ ,  $df= 5$ ,  $p= 0.000$ ). Therefore, it is evident that although this sample may approximate the population, it does not statistically represent the population (the sampling frame). This result may then impact the generalizability of the findings in this research. This issue of generalizability will be considered to be a key limitation of this research, which will be additionally discussed in section 6.5.

However, chi-square statistical results should be interpreted with caution because this statistic is sensitive to sample size and departures from multivariate normality (Chau,

1997). In addition, researchers should focus not only on the statistical significance but also on the practical significance when interpreting the analytical results (Hair et al. 1998; Stevens 1992). Following these suggestions, rather than ignoring this set of data, the researcher has continued to use it for the analysis, and will consider the generalizability issue as a limitation of this research.

In brief, histogram and chi-square statistics were used to examine whether this sample represented the sampling frame on three key *demographic variables*, namely: **gender**, **marital status**; and **education**. From the histogram displays, the sample was thought to closely approximate the distributions of the sampling frame in relation to **gender** and **marital status**; but not in relation to **education**. However, the chi-square statistics indicated a significant difference existed between this sample and the sampling frame in relation to **marital status**, and **education**, but not in relation to **gender**. This may result in some limitations in terms of the generalizability of this sample. The discussion now turns to the assessment of the achieved sample size.

### **5.2.3 Sample size**

The size of the sample has a direct effect on the appropriateness and the statistical power of both factor analysis and multiple regressions, which were used to examine reliability and validity of the collected data, and to test the proposed hypotheses respectively (Hair et al. 1998). The final sample size, after all corrections to errors and deletion of any invalid cases was 554 cases. Of the total possible mailed out questionnaires of 1588, this represents a response rate of 34.89%, which is higher than the expected response rate of 30% previously suggested in section 4.5.4. The total possible samples (mailed out questionnaires) will be discussed in greater detail in section 5.3.1.

The sample size of 554 cases meets the proposed guideline for the ratio of observations to the 42 indicators used in this research with a ratio of 10 to 1, which is the sample size recommended for performing exploratory factor analysis, and the ratio of observations to independent variables with a ratio of 20 to 1, the appropriate sample size for performing multiple regression analysis (Hair et al. 1998). Therefore, this sample size has been deemed appropriate for the data gathered from this research to be further analyzed, using both factor analysis and multiple regression techniques.



#### 5.2.4 Assessments of non-response error

Trend projection was adopted to measure non-response error by comparing responses from the samples who replied early to those who replied late (Churchill 1995; Kinnear & Taylor 1996), as previously proposed in Chapter 4. The sample, in receipt order, was split into two groups, namely: early and late respondents. All questionnaires returned to the researcher not later than the date of the first follow up letter mailed out were assumed to be from early respondents. On the other hand, those returned to the researcher after the date of the first follow up letter mailed out were assumed to be from non-respondents because these respondents replied less readily and only after some prompting.

Chi-square tests and Mann-Whitney U tests were used for this non-response error assessment. Firstly, cross tabulations were used to categorize these two respondent groups based on the seven *demographic characteristics* that were measured by nominal or ordinal scales. These variables included **gender, age, education, employment status, managerial position, marital status, and monthly family income**. These cross tabulations are displayed in Appendix 5.2. Chi-square tests were then adopted to test the difference between these two groups in relation to those seven *demographic variables*. The results of the Chi-square test are summarized in Table 5.2. They indicated no significant difference between the early and late responses in relation to all of these *demographic variables* (2-tailed  $p > 0.05$ ).

**Table 5.2- Chi-square tests for non-response error (Early VS Late respondents)**

Variables	Pearson Chi-square value	Degree of freedom	2-tailed p	Significant difference between two groups ( $p = 0.05$ )
Gender	0.985	1	0.321	No
Age	1.717	4	0.788	No
Education	2.894	5	0.716	No
Employment status	10.954	7	0.141	No
Managerial position	2.900	3	0.407	No
Marital status	6.246	3	0.100	No
Monthly family income	7.300	5	0.197	No

Source: Developed for this thesis and the analysis of survey data

In addition, Mann-Whitney U tests were performed in relation to the variables that were measured by the likert or ratio scales. These variables included one *demographic variable* (**family size**) and all eleven *psychographic* and *normative influencing variables*. The comparisons of mean ranks between the early and late response groups in relation to these variables are summarized in Appendix 5.3. Table 5.3 summarizes the

results of the Mann-Whitney U tests and these indicate no significant difference between the mean ranks of the early and late respondents (2-tailed  $p > 0.05$ ) in relation to all of these variables, but not in relation to need for cognition. From Appendix 5.3, in relation to the variable of **need for cognition**, the mean rank of the late respondent group (282.22) was greater than that of the early respondent group (253.81), indicating that late respondents probably have a higher need for cognition than early respondents when buying athletic footwear. Based on the results of both the Chi-square and the Mann-Whitney U tests, it appears that non-response error is not problematic for this study.

**Table 5.3- Mann-Whitney U tests for non-response error (Early VS Late respondents)**

Variables	Z score	2-tailed p	Significant difference between two groups ( $p = 0.05$ )
Family size	-0.730	0.466	No
Price consciousness	-1.773	0.076	No
Value consciousness	-1.062	0.288	No
Quality consciousness	-0.383	0.702	No
Market (price) mavenism	-1.207	0.227	No
Loyalty to other athletic footwear brands	-0.939	0.348	No
Variety seeking	-0.265	0.791	No
Need for cognition	-2.054	0.040	Yes
Innovativeness	-0.830	0.406	No
Deal proneness	-0.091	0.928	No
Motivation to conform to expectations of reference groups	-1.075	0.282	No
Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear	-0.644	0.520	No

Source: Developed for this thesis, and analysis of survey data

In summary, this section presented the profile of respondents, examined the issues of representativeness of the samples, determined the appropriateness of the achieved sample size, and assessed non-response error. It could be seen that this sample is not statistically representative of the 2002 Super Sports database (when considering **education** and **marital status**). This sample size is appropriate and the data collected from this research could be further analyzed. Non-response error is not a serious problem for this research. Now the discussion turns to the data preparation.

### 5.3 Data preparation

Before the application of any of the multivariate techniques, the researcher should explore the nature of the data in order to have a primary understanding of the

relationships among variables, and to ensure that collected data are edited, coded, and inputted into a form suitable for the analysis (Hair et al. 1998; Zikmund 1997). This section covers the data cleaning and screening strategies, and the assessment of missing data, outliers, and normality. These strategies are now discussed.

### 5.3.1 Data cleaning and screening strategies

Data cleaning and screening strategies involve data editing, coding, entry, and verification. By *editing* the collected data, the researcher is able to check for errors or omissions on the returned questionnaires. These tasks help to ensure completeness, consistency, and readability of the data (Cooper & Schindler 2001; Zikmund 1997). As discussed in section 4.11, returned questionnaires were examined to determine if they were acceptable for the analysis. Twelve questionnaires were returned unopened, and marked as return to sender. They were considered unacceptable and were excluded from the analysis. These questionnaire exclusions reduced the possible total sample to 1588 (1600-12). Four questionnaires were returned after the cutoff date, and these questionnaires were then excluded. A further three returned questionnaires were also excluded due to having more than 30 percent of the questionnaire left unanswered (Hair et al. 1998; Kinnear & Taylor 1996), leaving a total of 554 valid questionnaires returned (34.9% response rate).

After being edited, these returned questionnaires were then *coded* and *entered* into a format that allowed the raw data to be analyzed. The items that had been left unanswered, were considered as missing, and coded as '9'. Missing data will be detailed in the following section.

**Gender, employment status, and marital status** were measured using a nominal scale, which were transformed into dummy variables. This transformation enabled the researcher to test the influence of these variables on the **purchase intentions** using the regression analysis and indicator coding was employed for this transformation. The response category treated as the comparison group was coded as '0' (Hair et al. 1998). Some response categories recorded for **employment status** and **marital status** had few responses for the analysis. These categories were therefore combined with the others. Table 5.4 summarizes the data transformation and identifies the comparison groups for each of these *demographic variables*.

**Table 5.4- Summary of dummy variables**

Variables	Original response categories	New response categories and abbreviations
Gender	<ul style="list-style-type: none"> <li>• Female</li> <li>• Male</li> </ul>	<ul style="list-style-type: none"> <li>• Female (coded as 0, comparison group)</li> <li>• Male (coded as 1)</li> </ul>
Employment status	<ul style="list-style-type: none"> <li>• Student</li> <li>• Unemployed</li> <li>• Part time employed</li> <li>• Fulltime employed</li> <li>• Self-employed and without your own employees</li> <li>• Self-employed and with your own employees</li> <li>• Homemaker</li> <li>• Retired</li> </ul>	<ul style="list-style-type: none"> <li>• Unemployed (including students, unemployed respondents, homemakers, and retired consumers) (comparison group)</li> <li>• Employed (including part time and full time employee)</li> <li>• Self-employed (with and without their own employees)</li> </ul>
Marital status	<ul style="list-style-type: none"> <li>• Single</li> <li>• Married</li> <li>• Divorced</li> <li>• Widow or widower</li> </ul>	<ul style="list-style-type: none"> <li>• Unmarried (including single, divorced, and widow or widower) (coded as 0, comparison group)</li> <li>• Married (coded as 1)</li> </ul>

Source: developed for this thesis and the analysis of survey data

The coded data were then entered into the SPSS program, and were verified for accuracy and identification of the extreme cases by using frequency distributions and histograms (McPhail 1999). Five errors were found and were checked against the original questionnaires. These errors were data entry errors and were corrected. Frequency distributions were rerun and no further errors were uncovered. Following this, every tenth record was manually spot checked to ensure accuracy and these checks uncovered no further errors. The inputted data was now ready for the assessment of missing data, outliers, and tests of normality.

### **5.3.2 Assessment of missing data, outliers, and normality**

The procedures undertaken in this study to clean and screen data collected were discussed in the previous section. Data were further analyzed to determine the issues of missing data, outliers, and normality. These tasks are essential for the use of factor analysis, and regression analysis, which will now be discussed.

**Missing data.** Missing responses need to be analyzed because they could affect the generalizability of the results, and could lead the researcher to biased results (Hair et al. 1998). Missing values could exist during the research process external to the respondents or occur directly from the respondents (Hair et al. 1998). The steps to detect and minimize the missing values caused by any mistakes during the research process were

already discussed in Chapter 4 and in section 5.3.1. This section will focus on the missing data caused by omissions of respondents.

The number of missing data and responses for each question in the survey are summarized in Table 5.5. Most of the questions measuring independent consumer characteristics (excluding Q3.7, and Q 4.5) varied in the amount of missing data from 0- 5.50 percent. *Demographic questions* (Q4.1 to Q4.8) were found to have more missing data than the questions measuring *psychographic* and *normative influencing variables* (Q3.1 to Q3.42). This might be because respondents valued privacy and were sensitive to those demographic questions.

Question 3.7 was missed by 9.90 percent of the respondents. This question asked respondents to write down their most favorite athletic footwear brand. A possible reason for respondents failing to answer this question is that respondents might not actually have had a most favorite brand, and thus ignored this item.

There were 178 questionnaires (32.10%) with question 4.5 missing. However, this question was a subsequent question of Q4.4 asking respondents about the **employment status**. Respondents were required to answer Q4.5 only when their answer to Q4.4 was either part-time employee, or full-time employee, or business owner with their own employees. Therefore, when taking this condition into account, there were only 5 (1.4%) missing responses for Q4.4. This question was therefore retained in the analysis.

As the proportion of missing data was not too large, and there were no questions containing excessive levels of missing data, all of questions measuring consumer characteristics (Q3.1 to Q3.42, and Q4.1 to Q4.8) have been retained for analysis.

**Table 5.5- Summary of responses received and missing data for each item**

Items*	Number of responses	Number of missing data	Percent of missing data (%)	Items*	Number of responses	Number of missing data	Percent of missing data (%)
Q 2.1	550	4	0.73	Q3.26	552	2	0.37
Q3.1	550	4	0.73	Q3.27	553	1	0.19
Q3.2	551	3	0.55	Q3.28	551	3	0.55
Q3.3	550	4	0.73	Q3.29	552	2	0.37
Q3.4	551	3	0.55	Q3.30	552	2	0.37
Q3.5	551	3	0.55	Q3.31	552	2	0.37
Q3.6	551	3	0.55	Q3.32	551	3	0.55
Q3.7	499	55	9.90	Q3.33	551	3	0.55
Q3.8	550	4	0.73	Q3.34	552	2	0.37
Q3.9	550	4	0.73	Q3.35	551	3	0.55
Q3.10	551	3	0.55	Q3.36	550	4	0.73
Q3.11	551	3	0.55	Q3.37	552	2	0.37
Q3.12	552	2	0.37	Q3.38	551	3	0.55
Q3.13	551	3	0.55	Q3.39	553	1	0.19
Q3.14	551	3	0.55	Q3.40	552	2	0.37
Q3.15	547	7	1.27	Q3.41	552	2	0.37
Q3.16	553	1	0.19	Q3.42	553	1	0.19
Q3.17	552	2	0.37	Q4.1	541	13	2.35
Q3.18	552	2	0.37	Q4.2	541	13	2.35
Q3.19	552	2	0.37	Q4.3	540	14	2.53
Q3.20	549	5	0.91	Q4.4	524	30	5.42
Q3.21	553	1	0.19	Q4.5	376**	178**	32.1**
Q3.22	550	4	0.73	Q4.6	541	13	2.35
Q3.23	549	5	0.91	Q4.7	541	13	2.35
Q3.24	550	4	0.73	Q4.8	536	18	3.25
Q3.25	550	4	0.73				

Source: Developed for this thesis and the analysis of survey data

\*Q2.1: purchase intention

Q3.1 to Q3.42: psychographic and normative influencing variables

Q4.1 to Q4.8: demographic variables

\*\*Respondents were required to answer Q4.5 only when their answer to Q4.4 was either part-time employee, or full-time employee, or business owner with their own employees. Therefore, when taking this condition into account, there are 363 responses (98.6%) and 5 missing (1.4%) for Q4.5.

In relation to the question measuring the dependent variable, **purchase intentions** (Q2.1), 4 cases were found having missing values on this question. As suggested by Hair et al. (1998), these cases have been dropped when testing the proposed hypotheses. After treating the missing data, the data were then screened for outliers.

**Outliers.** Outliers are observations that substantially differ from the majority, and can also be the extreme values of dependent variables (Hair et al. 1998). Outliers are called leverage points when they exist with independent variables (Dielman 2001). These outliers can seriously distort statistical tests (Dielman 2001; Hair et al. 1998), which in turn can lead to ungeneralizable research results (Tinsley & Brown 2000). Outliers can stem from procedural errors or due to respondent answers (Hair et al. 1998). In this study, outliers arising from procedural errors were detected and corrected at the data cleaning and screening stage, as previously discussed in section 5.3.1.

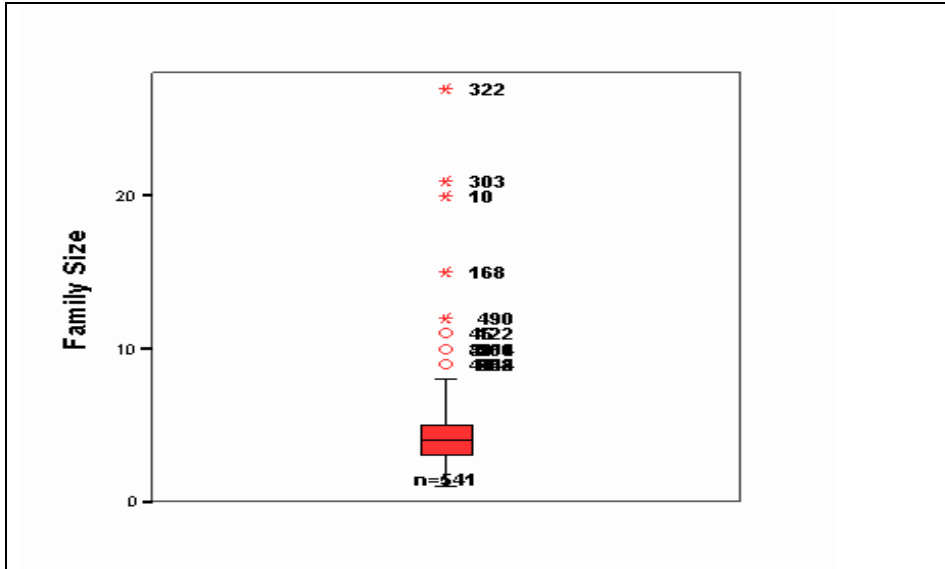
Outliers resulting from the respondents can be either extraordinary values, which are the explanation for the uniqueness of those observations, or extreme values for which the researcher has no explanation (Hair et al. 1998). For this research, there were no outliers noted in most of the questions in the questionnaire because the questions were close-ended providing a fixed range of alternative choices for respondents to answer under the Likert scales, dichotomous and multiple choice questions.

Outliers existed only in relation to an open-ended question measuring family size. These outliers were statistically examined using the boxplot technique from the SPSS 7.0. According to this software, outliers could be classified into outliers and extreme values depending on the degree to which they differed from the other observations. Values greater than 1.5 quartiles away from the box are true outliers whereas those greater than 3.0 quartiles away from the box are extreme values (SPSS Inc 2003). Only unusual observations that substantially differ from the other observations should be considered for deletion (Dielman 2001; Tinsley & Brown 2000). Therefore, only extreme values identified by the boxplot technique were dropped from analysis.

The result of boxplot is illustrated in Figure 5.5. This analysis identified five observations (cases 322, 303, 10, 168, and 490) having the family size of 12 and larger, as the extreme values. The family size of these cases was 27, 21, 20, 15, and 12,

respectively. To minimize the impact of these extreme values on the analytical results, they have been deleted from the analysis, and have been coded as missing.

**Figure 5.5- Boxplot identifying outliers for the variable of family size**



The asterisk (\*) and the circles (o) indicate extreme values, and outliers respectively  
 Interquartile range= 2. The box length is the distance between the 25<sup>th</sup> percentile (family size value =3) and the 75<sup>th</sup> percentile (family size value =5)  
 Outliers are values greater than 8 [ the 25<sup>th</sup> percentile family size value) + (interquartile range× 1.5)].  
 Extreme values are values greater than 11 [ the 75<sup>th</sup> percentile family size value + (interquartile range× 3.0)]  
 Source: Developed for this thesis and the analysis of survey data

**Normality.** The collected data should be tested for normality because non-normal data can affect both the proposed factor analysis and multiple regression analysis (Dielman 2001; Hair et al. 1998). All *psychographic* and *normative influencing items* were examined for normality. The resulting statistics of this test are summarized in Table 5.6. It was decided to use the p value of 0.01, rather than the p value of 0.05, as the cutoff value for the determination of whether the data was non-normal because this ‘p’ value is considered to be more appropriate for a normality analysis that involves a large number of constructs or variables (Stevens 1992).

The collected data was tested for skewness and kurtosis at the univariate level. From Table 5.6, twenty-six of the forty-one items were significantly skewed (p< 0.01) and twenty-two were significantly kurtotic (p< 0.01). This univariate analysis indicated that most of the data analyzed was therefore non-normal.



Normal data is necessary for factor analysis only when a statistical test is applied to the significance of the factors (Hair et al. 1998). However, in this research, factor analysis was used more conceptually than statistically, to determine quality of the measures. Therefore, the normality of this set of data was not remedied at this stage and data was used in this form as the input for the next step of factor analysis. In addition, normality will be assessed in more detail in the hypothesis testing section (section 5.6) and non-normal data will be transformed, if needed.

**Table 5.6- Summary of skewness and kurtosis statistics**

Variable	Univariate level Skewness		Kurtosis	
	Z-Score	P-Value	Z-Score	P-Value
Q3.1	8.986	0.000	3.671	0.000
Q3.2	-1.406	0.160	-2.195	0.028
Q3.3	-3.443	0.001	1.311	0.190
Q3.4	1.250	0.211	-4.999	0.000
Q3.5	-13.565	0.000	6.288	0.000
Q3.6	-6.356	0.000	-0.435	0.664
Q3.8	-19.285	0.000	8.718	0.000
Q3.9	-4.574	0.000	-1.907	0.056
Q3.10	2.667	0.008	-2.879	0.004
Q3.11	1.494	0.135	-7.151	0.000
Q3.12	-10.316	0.000	3.520	0.000
Q3.13	-4.167	0.000	-4.393	0.000
Q3.14	-0.132	0.895	-3.592	0.000
Q3.15	-3.411	0.001	-1.435	0.151
Q3.16	-0.117	0.906	-12.358	0.000
Q3.17	6.128	0.000	0.987	0.323
Q3.18	-5.295	0.000	2.265	0.023
Q3.19	-1.724	0.085	-4.892	0.000
Q3.20	8.674	0.000	2.417	0.016
Q3.21	-11.029	0.000	5.964	0.000
Q3.22	-2.269	0.023	-8.697	0.000
Q3.23	-4.236	0.000	1.309	0.191
Q3.24	-1.236	0.217	0.963	0.335
Q3.25	-4.428	0.000	2.278	0.023
Q3.26	0.852	0.394	-2.573	0.010
Q3.27	-11.947	0.000	6.934	0.000
Q3.28	5.066	0.000	0.640	0.522
Q3.29	-7.907	0.000	5.307	0.000
Q3.30	-13.463	0.000	7.606	0.000
Q3.31	0.081	0.935	1.826	0.068
Q3.32	-1.300	0.194	-7.953	0.000
Q3.33	-1.517	0.129	0.827	0.408
Q3.34	-3.132	0.002	-5.047	0.000
Q3.35	-0.643	0.520	-2.690	0.007
Q3.36	-4.828	0.000	2.710	0.007
Q3.37	-2.964	0.003	-1.705	0.088
Q3.38	8.640	0.000	3.796	0.000
Q3.39	-11.468	0.000	6.843	0.000
Q3.40	-0.802	0.423	-1.387	0.166
Q3.41	-0.969	0.333	-1.369	0.171
Q3.42	-4.980	0.000	0.502	0.616

Nonnormal data when P<0.01

Source: Developed for this thesis and analysis of survey data

In summary, this section discussed data cleaning and screening strategies, which were implemented to ensure the accuracy and the completeness of the collected data. Missing data, outliers, and non-normal data were identified and handled. The discussion now turns to descriptive analysis.

#### 5.4 Descriptive analysis

*Demographic characteristics* of the sample have been explored and summarized in the previous section. In this section, *psychographic* and *normative influencing variables*, and the **purchase intention variable** are examined to gain a primary understanding of the *psychographic characteristics* of the samples. As these variables were measured using Likert or behavioral intention scales, the means and standard deviations of these variables were used to describe these characteristics. Summary statistics of the means and standard deviations for these variables are presented in Table 5.7.

In relation to the **purchase intention variable**, this variable was rated on the behavioral intention scale with a score of 1 indicating definitely not purchasing, a mid-point of 3 indicating unsure, and a score of 5 indicating definitely purchasing. On average, respondents tended to be unsure whether they would purchase the seasonally discounted Reebok athletic footwear ( $m = 3.59$ ,  $sd = 0.84$ ). It was therefore concluded that respondents tended to respond neutrally to the seasonally discounted Reebok athletic footwear.

With respect to items measuring *psychographic* and *normative influencing variables*, many of the means were higher than the neutral position indicating some level of agreement with each of the statements (items rated on a five point Likert scale with a score of 1 indicating strong disagreement, with mid-point of 3 indicating a neutral position, and a score of 5 indicating strong agreement). The means and standard deviations for each of the *psychographic* and *normative influencing variables* were used to primarily determine whether respondents had these characteristics, as proposed in chapter 2 and 3.

For **price consciousness**, from three of the four items comprising this variable, respondents expressed that they would not seriously be conscious of the price of athletic footwear when buying this product. They were unlikely to *rely heavily on the lowest*

*priced athletic footwear* (Q3.1,  $m = 1.99$ ,  $sd = 0.87$ ). They would not *spend extra time to find the lowest priced athletic footwear* (Q3.11,  $m = 2.69$ ,  $sd = 1.06$ ) and were unlikely to perceive that it was *necessary to buy the discounted athletic footwear* (Q3.38,  $m = 2.11$ ,  $sd = 0.88$ ). There was only one item being rated as neutral with responses located around the mid point (Q3.19,  $m = 3.12$ ,  $sd = 1.04$ ). This item did not strongly indicate that respondents would *compare prices of the athletic footwear in order to find the lowest priced ones* when buying this product. In general, these results have shown that respondents in this sample were unlikely to be price conscious consumers who focused particularly on low priced athletic footwear when buying this product.

In relation to **value consciousness**, all four items measuring this psychographic characteristic were rated highly. In other words, respondents showed strong agreement with them. In general, respondents indicated that they tried to *maximize the quality they received from the money spent on a purchase of athletic footwear* (Q3.12,  $m = 4.48$ ,  $sd = 0.74$ ). They strongly agreed that it was *necessary to take into account the low price and the quality at the same time* (Q3.30,  $m = 4.51$ ,  $sd = 0.61$ ) They attempted to *get the best value from the money they spent* (Q3.39,  $m = 4.40$ ,  $sd = 0.66$ ) and they indicated that they would *buy other lower priced athletic footwear if these footwear meet certain quality requirements* (Q3.12,  $m = 3.90$ ,  $sd = 0.94$ ). These results have signaled that these respondents are likely to be value conscious consumers who compare benefits and costs in relation to a purchase of discounted athletic footwear.

**Table 5.7- Summary of means and standard deviations for *psychographic, normative influencing* and purchase intention variables**

Question/ Variables	Mean*	Standard deviation
<b>Psychographic variables</b>		
<b>Price consciousness</b>		
(3.1) When buying a pair of athletic footwear, I rely heavily on the lowest priced one.	1.99	0.867
(3.11) I will willingly spend extra time to find the lowest priced athletic footwear.	2.69	1.056
(3.19) I compare prices in order to find the lowest priced athletic footwear.	3.12	1.037
(3.38) When buying a pair of athletic footwear, it is necessary for me to buy the lowest priced athletic footwear.	2.11	0.878
<b>Value consciousness</b>		
(3.8) When buying a pair of athletic footwear, I will try to maximize the quality I get for the money I spend.	4.48	0.743
(3.12) I will buy other lower priced athletic footwear than the higher priced one, but the lower priced footwear must meet certain quality requirements.	3.90	0.934
(3.30) When buying a pair of athletic footwear, it is necessary for me to think about the low price and the quality at the same time.	4.51	0.611
(3.39) When buying a pair of athletic footwear, I will ensure that I get the best value from the money I spend.	4.40	0.657
<b>Quality consciousness</b>		
(3.20) When buying a pair of athletic footwear, I will give up high quality for a lower price (r)	1.98	0.915
(3.22) I think that the higher the price of athletic footwear, the higher the quality.	3.30	1.064
(3.29) I am willing to pay a bit more for the best quality athletic footwear.	4.32	0.637
(3.34) I believe that a price of athletic footwear products is a good indicator of product quality.	3.17	1.016
<b>Innovativeness</b>		
(3.10) I am often the first person in my friends or my family to purchase a new athletic footwear model.	2.61	1.026
(3.25) I am interested in the information about new models of athletic footwear.	3.63	0.800
(3.37) When buying a pair of athletic footwear, I pay more attention to new athletic footwear models than the current ones.	3.35	0.897
<b>Market (price) mavenism</b>		
(3.2) For athletic footwear products, I would be better able than most people to tell someone where to shop for discounted athletic footwear.	2.95	0.932
(3.9) People think of me as a good source of information of discounting programs of athletic footwear products.	3.10	0.880
(3.18) I like helping people by providing them with information of discounting programs of athletic footwear products.	3.27	0.827
(3.41) I am an expert when it comes to suggesting places to shop for discounted athletic footwear products.	3.01	0.916
<b>Loyalty to other athletic footwear brands</b>		
(3.7) My most favorite brand of athletic footwear is.....(please specify brand)		
(3.16) I will buy only my most favorite brand of athletic footwear.	3.25	1.121
(3.32) If my most favorite brand of athletic footwear is <u>not</u> available at a shopping outlet, I will choose another athletic footwear brand. (r)	2.90	0.964
(3.42) If my most favorite brand of athletic footwear is <u>not</u> available at a shopping outlet, I will search for it at other outlets.	3.56	0.868

**Table 5.7- continued**

<b>Question/ Variables</b>	<b>Mean*</b>	<b>Standard deviation</b>
<b>Variety seeking</b>		
(3.4) I do get bored from the use of the same athletic footwear brands over and over again.	2.80	1.040
(3.14) I will buy different athletic footwear brands to reduce my boredom.	2.96	0.979
(3.24) Purchasing some different athletic footwear brands from time to time makes me feel better.	3.25	0.704
(3.40) I buy different athletic footwear brands to get some variety.	3.14	0.909
<b>Need for cognition</b>		
(3.5) I think that deliberate thinking is necessary for buying a pair of athletic footwear.	4.33	0.779
(3.21) When buying a pair of athletic footwear, I do require much thought.	4.16	0.763
(3.27) I find it especially satisfying to have a deliberate thought when buying a pair of athletic footwear.	4.16	0.743
<b>Deal proneness</b>		
(3.6) Discounting programs play a big part in my purchase decisions when buying a pair of athletic footwear.	3.55	1.038
(3.15) I am more likely to buy a pair of athletic footwear that are on sale.	3.31	0.945
(3.23) When I buy a pair of athletic footwear that are on sale, I feel that I am getting a good deal.	3.53	0.786
(3.31) Buying a pair of discounted athletic footwear makes me feel good.	3.33	0.754
<b>Normative influencing variables</b>		
<b>Motivation to conform to expectations of reference groups</b>		
(3.3) It bothers me if my friends or my family disapprove of my purchase of athletic footwear products.	2.87	0.880
(3.13) My purchase decisions in relation to athletic footwear products depend on how my friends or my family wish me to behave.	3.01	0.988
(3.26) It is important to me to fit in with what my friends or my family think about a purchase of athletic footwear.	2.52	0.925
(3.35) I am concerned about how my friends or my family make judgments about me by the athletic footwear that I buy.	2.73	0.954
<b>Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear</b>		
(3.17) My friends or my family think that they would be embarrassed to buy a pair of the seasonally discounted Reebok athletic footwear.(r)	1.83	0.794
(3.28) My friends or my family think that purchasing a pair of the seasonally discounted Reebok athletic footwear would damage their self-image.(r)	1.92	0.773
(3.33) My friends or my family think that it is smart to buy a pair of the seasonally discounted Reebok athletic footwear.	3.41	0.817
(3.36) My friends or my family think that they like to buy a pair of the seasonally discounted Reebok athletic footwear.	3.41	0.765
<b>Response variable</b>		
<b>Purchase intentions</b>		
(2.1) How likely is it that I would buy Reebok athletic footwear that were 30% seasonally discounted?	3.5927	0.83935

Source: Analysis of survey data

\*Minimum value= 1.00 and maximum value = 5.00

(r) These items were negative questions that need to be reversed when interpreting the values.

For **quality consciousness**, half of the four items measuring this variable were rated as neutral with responses positioned around the mid point (Q3.34, m = 3.17, sd = 1.02; and Q3.22, m = 3.30, sd = 1.06). These neutral responses indicated that respondents did not strongly perceive *the price of athletic footwear products as a good indicator of product quality*, and did not strongly perceive *higher priced athletic footwear as higher quality*

*products*, respectively. However, the other two items measuring this variable (Q3.29 and Q3.20) showed that respondents were quality conscious when buying athletic footwear. Item 3.29 indicated that respondents were *definitely willing to pay more for the best quality athletic footwear* ( $m = 4.32$ ,  $sd = 0.64$ ). Item 3.20 was phrased in a negative manner, and when reversed, it indicated that respondents would *not give up high quality for lower priced athletic footwear* ( $m = 1.98$ ,  $sd = 0.92$ ). In general, these results tend to illustrate that these particular respondents were quality conscious when buying athletic footwear.

Three items were used to measure the **innovativeness** of respondents. Two of the three items measuring this variable did not strongly show that respondents were innovative athletic footwear consumers. Item 3.37 was rated as neutral with responses located around the mid point and it did not strongly indicate that respondents were *more interested in new athletic footwear models rather than the current models* ( $m = 3.35$ ,  $sd = 0.89$ ), *when buying athletic footwear*. Another item of this scale also showed that respondents tended not to perceive that they were *the first person in their reference groups to purchase a new athletic footwear model* (Q3.10,  $m = 2.61$ ,  $sd = 1.03$ ). However, the last item of this scale indicated that respondents were *likely to be interested in the information about new models of athletic footwear* (Q3.25,  $m = 3.63$ ,  $sd = 0.80$ ). From these results, it appears that these respondents tend not to be innovative consumers because these respondents might be neither part of the early majority in relation to the adoption of innovation nor opinion leaders (Hawkins et al. 1998; Hoyer & MacInnis 1997).

The results of the previous section (innovativeness) support the findings in relation to **market (price) mavenism**. All four items measuring this variable were rated as neutral with responses located around the mid point (Q3.2,  $m = 2.95$ ,  $sd = 0.93$ ; Q3.9,  $m = 3.10$ ,  $sd = 0.88$ ; Q3.18,  $m = 3.27$ ,  $sd = 0.83$ ; and Q3.41,  $m = 3.01$ ,  $sd = 0.92$ ). This indicates that these respondents, on average, are unlikely to be market mavens even though some individuals in the sample may be.

Four items were employed to measure **brand loyalty** of respondents. One item (Q3.7) was used for identifying the most favorite athletic footwear brands of respondents. These responses were classified into 'loyal to Reebok' and 'loyal to the other athletic

footwear brands'. The other three items (Q3.16, Q3.32, Q3.42) were used to measure the degree to which respondents were loyal to the brand(s) they identified. Two of these three items (Q3.16 and Q3.32) were rated as neutral. Item 3.16 did not strongly show that respondents would *buy only their most favorite brand of athletic footwear* ( $m = 3.25$ ,  $sd = 1.12$ ). Item 3.32 was phrased in a negative manner, and when reversed, it did not strongly indicate that these respondents would *buy another athletic footwear brand if their most favorite brand was not available at a shopping outlet* ( $m = 2.90$ ,  $sd = 0.96$ ). However, the last item in this scale showed that respondents were likely to be loyal to a specific athletic footwear brand because respondents indicated that *if their most favorite athletic footwear brand(s) was not available at a shopping outlet, they would search for it at other outlets* (Q3.42,  $m = 3.56$ ,  $sd = 0.87$ ). In general, these results have not strongly shown that these respondents are loyal to a particular athletic footwear brand(s).

In relation to **variety seeking**, all four items measuring this variable were rated as neutral with responses located around the mid point (Q3.24,  $m = 3.25$ ,  $sd = 0.70$ ; Q3.40,  $m = 3.14$ ,  $sd = 0.91$ ; Q3.14,  $m = 2.96$ ,  $sd = 0.98$ ; and Q3.4,  $m = 2.80$ ,  $sd = 1.04$ ). These results have not strongly indicated that these respondents seek variety and nor do they purchase several athletic footwear brands to reduce their boredom.

Three items capturing the respondent's **need for cognition** were all rated highly with respondents strongly indicating that *deliberate thinking was necessary for buying a pair of athletic footwear* (Q3.5,  $m = 4.33$ ,  $sd = 0.78$ ). They *required much thought when buying athletic footwear* (Q3.21  $m = 4.16$ ,  $sd = 0.76$ ), and *were satisfied to have a deliberate thought when buying a pair of athletic footwear* (Q3.27,  $m = 4.16$ ,  $sd = 0.74$ ). These results show that these respondents were deliberate thinkers when buying athletic footwear.

**Deal proneness** was measured by four items. The first two items (Q3.15 and Q 3.31) were rated as neutral. These items did not strongly indicate that respondents were *more likely to buy athletic footwear that were on sale* (Q3.15,  $m = 3.31$ ,  $sd = 0.95$ ) and that these respondents *felt good* (Q3.31,  $m = 3.33$ ,  $sd = 0.75$ ), *when buying athletic footwear that were on sale*. However, the other two items supported that respondents were likely to be deal prone consumers because respondents *believed that discounting programs*

*played a big part in their purchase decisions* (Q3.6,  $m = 3.55$ ,  $sd = 1.04$ ), and they also *thought that they got a good deal* (Q3.23,  $m = 3.53$ ,  $sd = 0.79$ ), when buying a pair of athletic footwear. These results tend to show that respondents are likely to be deal prone consumers.

In relation to *normative influencing factors* (namely: **motivation to conform to expectations of reference groups** and **attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**), four items were employed to measure each of these variables. All items measuring the respondent's '**motivation to conform**' (Q3.3, Q3.13, Q3.26, and Q3.35) did not strongly indicate that these respondents were likely to conform to the expectations of reference groups in the purchase of athletic footwear since their responses to all of these items were located around the neutral point. Respondents did not strongly indicate that they *were bothered if their friends or family disapproved of their purchase of athletic footwear*' (Q3.3,  $m = 2.87$ ,  $sd = 0.88$ ), that *their purchase decisions in relation to athletic footwear products depended on how their friends or family wished them to behave*' (Q3.13,  $m = 3.01$ ,  $sd = 0.99$ ). In addition, they tended not to strongly perceive *that it was important to fit in with what their friends or family thought about a purchase of athletic footwear* (Q3.26,  $m = 2.52$ ,  $sd = 0.93$ ), and that they were *concerned about how their friends or family made judgments about them by the athletic footwear that they bought* (Q3.35,  $m = 2.73$ ,  $sd = 0.95$ ). It appears that these respondents are unlikely to be motivated to conform to the expectations of reference groups when buying athletic footwear.

In relation to '**attitudes of reference groups**', the results indicated that reference groups of these respondents had favorable attitudes towards the seasonally discounted Reebok athletic footwear. These respondents indicated that *their friends or family thought that it would be smart to buy a pair of the seasonally discounted Reebok athletic footwear* (Q3.33,  $m = 3.41$ ,  $sd = 0.82$ ), and further, that *their friends or family also liked to buy the seasonally discounted Reebok athletic footwear* (Q3.36,  $m = 3.41$ ,  $sd = 0.77$ ). The other two items were negatively phrased questions, and when reversed, these items showed similar results. These respondents indicated that *their friends or family would not be embarrassed to buy a pair of the seasonally discounted Reebok athletic footwear* (Q3.17,  $m = 1.83$ ,  $sd = 0.79$ ), and that they *did not believe that purchasing a pair of the*



*seasonally discounted Reebok athletic footwear damaged their self-image* (Q3.28,  $m = 1.92$ ,  $sd = 0.77$ ).

In summary, this section summarized descriptive statistics regarding the respondents' intentions to purchase the seasonally discounted Reebok athletic footwear, and their *psychographic* and *normative influencing characteristics*, using means and standard deviations of these variables. From these results, it appears that these respondents were unsure whether they would purchase the seasonally discounted Reebok athletic footwear, and that they were likely to have the characteristics of **value consciousness**, **quality consciousness**, **need for cognition**, and **deal proneness**. They were unlikely to **depend on the expectations of reference groups**, and that **their reference groups** were likely to have **positive attitudes towards a purchase of the seasonally discounted Reebok athletic footwear**.

### **5.5 Assessments of quality of the measurement**

Respondent characteristics were analyzed in previous sections. Prior to the testing of the proposed hypotheses, the researcher needs to assess reliability and validity of the measures, as using multiple indicators for measuring each of the constructs could raise the problem of reliability and validity since the indicators could have sizable measurement errors (Cheng 2001). If this is found to be the case, then the researcher needs to delete unreliable and/or invalid measures to ensure that measurement errors would be minimized (Cheng 2001; Hair et al. 1998; Zikmund 1997), and will not therefore distort the investigated relationships or make the analysis less powerful (Hair et al. 1998).

Common factor analysis or factor analysis was considered appropriate to be used in this research to capture the structure of the interrelationships of the items and to assess validity and reliability of the measurements (Bentler & Kano 1990; Coakes & Steed 2001; Hair et al. 1998). This analysis was performed to determine whether the indicators were uni-dimensional, to measure whether the indicators captured the meaning of the underlining construct effectively, and to test the reliability of the measures, as proposed in chapter 4.

Factor analysis can be performed from either exploratory or confirmatory perspectives (Hair et al. 1998). Exploratory factor analysis can be used to provide the empirical basis for determining the structure of a set of variables, and to produce the estimates of the factors and the contributions of each variable to the factors. This analysis is used when the researchers do not control which items describe which constructs (Hair et al. 1998).

Confirmatory factor analysis is a more sophisticated technique that can be employed when the researcher has complete control over the specification of multiple indicators for each of the constructs investigated (Cheng 2001; Hair et al. 1998). This analytical technique is appropriate for assessing validity and reliability of the complicated measures (Rubio, Berg-Weger & Tebb 1999).

As previously discussed in chapter 4, the measures used in this thesis were unlikely to be complicated scales. That is, three to four indicators were used to directly measure each of the *psychographic* and *normative influencing constructs*, and each of these constructs did not have several dimensions. Exploratory factor analysis was therefore considered appropriate, and was conducted first for a preliminary assessment of the quality of measurement scales used in this study. In section 5.5.1, initial factor analysis with all 41 items inputted simultaneously was conducted to explore the overall picture of the correlations of these items, and to determine the issues of uni-dimensionality and validity of these scales. In section 5.5.2, confirmatory factor analysis was performed next for each measurement scale in order to have a closer assessment of the issues of uni-dimensionality and reliability of these scales, and in order to purify the measures. And lastly in section 5.5.3, the collected data from the purified scales were combined into a set of independent variables appropriate to be used as an input for the hypothesis testing section. The discussion now turns to the results of these analyses, commencing with the initial factor analysis with all items inputted.

### **5.5.1 Initial factor analysis with all 41 items included**

Initial factor analysis with all items included simultaneously was performed in this section to determine whether these items adequately reflected critical aspects of the constructs being measured. Poor items were identified and they will further be assessed in the next section (section 5.5.2) in terms of their retention or deletion.

A primary step of factor analysis is to assess the adequacy of the correlation of the items. Correlation analysis, the Bartlett test of sphericity for the correlation matrix, and a test of sampling adequacy ‘the Kaiser-Meyer-Olkin’, were the three analytical tools used for this assessment. The results of these tests are discussed next.

Firstly, a correlation analysis was run using SPSS in order to justify the application of factor analysis. Interrelation between variables is the critical assumption underlying factor analysis. Data with a substantial number of strong correlations (correlation coefficients greater than 0.30) are deemed appropriate to be used in factor analysis (Hair et al. 1998).

The correlation matrix of all observed *psychographic* and *normative influencing indicators* is illustrated in Table 5.8. As a result, most of the indicators were found to be strongly related with at least one other indicator with a correlation greater than 0.3. Only two items were found to have a weak correlation with all other indicators (correlation coefficients below 0.3) and they included item 3.12 measuring **value consciousness** (*‘I will buy other lower priced athletic footwear than the higher priced one, but the lower priced footwear must meet certain quality requirements.’*) and item 3.16 measuring **loyalty to other athletic footwear brands** (*‘I will buy only my most favorite brand of athletic footwear.’*). These two statements might be inappropriate to proceed with factor analysis and in turn might need deletion. However, they were left in the analysis at this primary stage and will be noted for closer examination when the individual measures are tested.

Secondly, the Bartlett test of sphericity for the correlation matrix was used to assess the overall significance of the correlation matrix. A significance of this test indicates the adequacy of the magnitude of the correlations (Hair et al. 1998). For this set of data, the Bartlett test of sphericity for the correlation matrix was  $\chi^2 = 5831.569$  with degrees of freedom (df) = 820 and a significance level of  $p = 0.000$ . This supported the observed large correlations of these indicators.

Next, a measure of sampling adequacy, the Kaiser-Meyer-Olkin (KMO), was used to test the adequacy of the statement relationships. The data was considered appropriate for factor analysis as the KMO (0.797) was greater than 0.6 (Tabacknick & Fidell 1996).

**Table 5.8-Correlation matrix of all items measuring *psychographic* and *normative influencing* constructs**

Variables	Q	3.1	3.2	3.3	3.4	3.5	3.6	3.8	3.9	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.18	3.19	3.20	3.21	3.22	
Price consciousness	3.1	1.000																					
Price mavenism	3.2	.004	1.000																				
Motivation to conform	3.3	.170**	.010	1.000																			
Variety seeking	3.4	.085	.011*	.154**	1.000																		
Need for cognition	3.5	.031	.114*	.030	.038	1.000																	
Deal proneness	3.6	.161**	.163**	.081	.076	.118*	1.000																
Value consciousness	3.8	.014	.108*	-.039	-.010	.251**	.077	1.000															
Price mavenism	3.9	.034	.556**	.016	.011	.091*	.116*	.122**	1.000														
Innovativeness	3.10	-.065	.428**	.103*	.161**	.028	-.037	.046	.420**	1.000													
Price consciousness	3.11	.358**	.152**	.101*	.079	.111*	.327**	.164**	.203**	.079	1.000												
Value consciousness	3.12	.161**	.060	-.024	-.025	.187**	.121**	.276**	.086	-.037	.265**	1.000											
Motivation to conform	3.13	.055	.081	.269**	.051	.039	.161**	.050	.137**	.045	.144**	.090*	1.000										
Variety seeking	3.14	.059	.039	.125**	.511**	-.052	.043	-.066	.044	.078	.035	-.030	.081	1.000									
Deal proneness	3.15	.247**	.177**	-.007	.066	.077	.485**	.058	.120**	-.078	.353**	.170**	.043	.110*	1.000								
Loyalty to other brands	3.16	.045	.137**	.095*	.081	.020	.029	.007	.139**	.203**	-.042	.003	-.002	-.046	-.025	1.000							
Attitude of reference gr	3.17	.030	-.056	-.085	-.065	.104*	.161**	.067	-.079	-.129**	-.079	.146**	-.033	-.060	.205**	-.190**	1.000						
Price mavenism	3.18	.034	.481**	-.018	.082	.136**	.179**	.072	.542**	.301**	.221**	.142**	.188**	.114*	.248**	.050	.018	1.000					
Price consciousness	3.19	.301**	.117*	.092*	.024	.066	.266**	.098*	.110*	-.022	.501**	.256**	.118*	.114*	.339**	.056	.007	.113*	1.000				
Quality consciousness	3.20	-.202*	-.046	-.050	-.043	.055	-.137**	.065	.068	.132**	-.234**	-.156**	-.021	-.040	-.184**	.021	.045	.024	-.319**	1.000			
Need for cognition	3.21	.059	.071	.041	-.001	.405**	.081	.202**	.117*	.148**	.087	.204**	.017	-.025	.079	.085	.164**	.117*	.155**	.104*	1.000		
Quality consciousness	3.22	-.121**	.052	-.008	.067	-.023	-.011	.048	-.006	.076	-.065	-.035	.039	-.025	-.039	.122**	-.029	-.068	.008	-.102*	.014	1.000	
Deal proneness	3.23	.128**	.182**	.041	.033	.012	.310**	.038	.105*	.021	.217**	.100*	.061	.068	.431**	-.034	.237**	.167**	.284**	-.100*	.075	.043	
Variety seeking	3.24	-.002	.088	.074	.298**	.030	-.006	-.037	-.012	.034	-.019	-.013	.069	.428**	.131**	-.017	-.020	.033	.055	-.038	.024	.054	
Innovativeness	3.25	.013	.359**	.112*	.087	.159**	-.007	.099*	.327**	.369**	.108*	.041	.056	.115*	.001	.168**	-.032	.337**	.085	.053	.190**	.039	
Motivation to conform	3.26	.073	.053	.374**	.087	.011	.104*	.042	.070	.066	.142**	.042	.370**	.073	.028	.055	-.134**	.108*	.110*	-.091*	-.048	.039	
Need for cognition	3.27	.075	.112*	.019	-.003	.377**	.061	.219**	.138**	.147**	.141**	.185**	.062	-.027	.092*	.056	.150**	.180**	.134**	.086	.468**	.085	
Attitude of reference gr	3.28	-.067	-.076	-.117*	-.095*	.102*	.023	.080	-.096*	-.187**	-.040	.071	-.085	-.038	.124**	-.165**	.472**	-.051	-.025	.084	.136**	-.056	
Quality consciousness	3.29	-.179**	.183**	-.108*	.019	.175**	.019	.179**	.122**	.146**	-.076	.043	.008	-.017	-.008	.100*	.108*	.183**	-.024	.237**	.257**	.077	
Value consciousness	3.30	.003	.092*	-.048	-.005	.306**	.040	.328**	.043	.024	.079	.165**	.052	-.047	.107*	.054	.160**	.088	.051	.121**	.301**	.033	
Deal proneness	3.31	.136**	.105*	-.029	-.048	.027	.379**	.089	.088	-.102*	.279**	.106*	.039	.008	.469**	-.033	.159**	.105*	.320**	-.183	.053	.002	
Loyalty to other brands	3.32	-.068	.051	-.023	-.027	.049	-.014	.046	.073	.045	-.029	.002	-.077	-.072	-.061	.231**	-.036	-.005	.039	.031	.089	.128**	
Attitude of reference gr	3.33	.073	.185**	.049	.040	.113*	.301**	.092*	.187**	.083	.187**	.090*	.073	.067	.337**	-.043	.231**	.225**	.162**	-.003	.087	.028	
Quality consciousness	3.34	-.089*	.133**	-.026	.139**	-.003	.020	.049	.116*	.158**	.038	-.088	.004	.031	.018	.113*	-.054	-.001	.039	-.073	-.108*	.495**	
Motivation to conform	3.35	.035	.190**	.230**	.106*	.022	.054	-.009	.152**	.230**	.065	-.083	.215**	.074	-.003	.170**	-.137**	.149**	.042	-.023	-.023	.165**	
Attitude of reference gr	3.36	.045	.279**	.104*	.089	.104*	.235**	.060	.252**	.114*	.163**	.160**	.146**	.070	.321**	.030	.165**	.320**	.114*	-.090	.077	-.007	
Innovativeness	3.37	-.025	.175**	.078	.106*	.023	.007	.087	.163**	.317**	.031	-.061	.086	.050	-.008	.172**	-.048	.099*	.040	.072	.105*	.192**	
Price consciousness	3.38	.436**	.195**	-.027	.111*	.100*	.231**	.067	.160**	.079	.402**	.133**	.043	-.035	.214**	.104*	-.064	.108*	.344**	-.287**	.058	-.013	
Value consciousness	3.39	.069	.118*	-.014	-.001	.234**	.045	.343**	.128**	.065	.096*	.193**	.032	-.015	.120**	.058	.218**	.154**	.097*	.117*	.320**	-.043	
Variety seeking	3.40	.037	.179**	.094*	.404**	.047	.064	.013	.083	.149**	.027	-.040	.090*	.581**	.094*	-.004	-.013	.106*	.069	.049	.058	-.007	
Price mavenism	3.41	.026	.594**	.000	.141**	.066	.127**	.080	.556**	.387**	.164**	.072	.070	.090	.170**	.147**	-.038	.537**	.129**	.043	.036	.054	
Loyalty to other brands	3.42	-.097	.121**	.019	.060	.147**	-.020	.058	.137**	.124**	.050	.093*	-.037	.021	-.006	.216**	-.048	.157**	.075	.063	.159**	.097*	

(\* p < .05, \*\* p < .01)

**Table 5.8-continued**

Variables	Q	3.23	3.24	3.25	3.26	3.27	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.35	3.36	3.37	3.38	3.39	3.40	3.41	3.42	
Price consciousness	3.1																					
Price mavenism	3.2																					
Motivation to conform	3.3																					
Variety seeking	3.4																					
Need for cognition	3.5																					
Deal proneness	3.6																					
Value consciousness	3.8																					
Price mavenism	3.9																					
Innovativeness	3.10																					
Price consciousness	3.11																					
Value consciousness	3.12																					
Motivation to conform	3.13																					
Variety seeking	3.14																					
Deal proneness	3.15																					
Loyalty to other brands	3.16																					
Attitude of reference gr	3.17																					
Price mavenism	3.18																					
Price consciousness	3.19																					
Quality consciousness	3.20																					
Need for cognition	3.21																					
Quality consciousness	3.22																					
Deal proneness	3.23	1.000																				
Variety seeking	3.24	.136**	1.000																			
Innovativeness	3.25	.042	.090	1.000																		
Motivation to conform	3.26	.008	.018	.175**	1.000																	
Need for cognition	3.27	.099*	-.014	.182**	.022	1.000																
Attitude of reference gr	3.28	.174**	.017	-.077	-.189**	.081	1.000															
Quality consciousness	3.29	.014	.036	.206**	-.115*	.239**	.189**	1.000														
Value consciousness	3.30	.014	-.028	.165**	-.035	.311**	.177**	.420**	1.000													
Deal proneness	3.31	.435**	.020	-.047	-.025	.051	.120**	.035	.065	1.000												
Loyalty to other brands	3.32	.011	-.140**	.070	-.078	.081	.062	.126**	-.068	.001	1.000											
Attitude of reference gr	3.33	.459**	.067	.048	.042	.081	.154**	.097*	.058	.413**	.036	1.000										
Quality consciousness	3.34	.082	.048	.060	.060	.033	-.074	.054	-.003	.088	.110*	.147**	1.000									
Motivation to conform	3.35	.048	.014	.178**	.336**	.004	-.180**	.023	-.045	.005	.002	.070*	.333**	1.000								
Attitude of reference gr	3.36	.298**	.039	.150**	.150**	.096*	-.009	.053	.074	.259**	.046	.475**	.099*	.166**	1.000							
Innovativeness	3.37	.083	.083	.281**	.035	.071	-.081	.243**	.104*	-.029	.114*	.071	.174**	.225**	.062	1.000						
Price consciousness	3.38	.097*	.036	.125**	.061	.072	-.189**	-.153**	-.045	.179**	-.091	.097*	.053	.140**	.158**	.108*	1.000					
Value consciousness	3.39	.144**	-.014	.210**	.008	.393**	.157**	.209**	.455**	.135**	.064	.114*	-.026	-.035	.090	.100*	.039	1.000				
Variety seeking	3.40	.161**	.476**	.153**	.046	-.001	-.006	.035	-.014	.057	-.070	.138**	.050	.145**	.051	.123**	.141**	.028	1.000			
Price mavenism	3.41	.125**	.039	.404**	.071	.142**	-.087	.129**	.065	.134**	-.019	.200**	.143**	.134**	.284**	.169**	.222**	.111*	.205**	1.000		
Loyalty to other brands	3.42	.081	.003	.174**	-.061	.146**	.056	.235**	.150**	.038	.327**	.007	.093*	.126**	.083	.222**	.030	.155**	.088	.124**	1.000	

(\* p < .05, \*\* p < .01)

Source: Analysis of survey data

In general, this set of data was sufficiently correlated to justify the application of factor analysis based on the results of three primary analyses, including correlation analysis, the Bartlett test of sphericity for the correlation matrix, and a test of sampling adequacy, 'the Kaiser-Meyer-Olkin'. After the correlation analysis, the discussion now moves to the justification of the chosen rotation technique.

A factor analysis with an oblimin rotation technique was considered the most appropriate method for this analysis. This technique was chosen over an orthogonal technique since there was no strong evidence in either the literature or the previous studies to support the assumption that the underlining factors would be completely uncorrelated (Hair et al. 1998). Latent Root Criterion technique was used to specify the number of factors to extract because this technique can provide reliable analytical results for a study researching a number of indicators between 20 and 50 (Hair et al. 1998). Only the factors having eigenvalues greater than 1 were considered significant and the factors with eigenvalues less than 1 were considered insignificant and were disregarded (Hair et al. 1998).

Initial factor analysis used all 41 indicators measuring independent psychographic and normative influencing variables with an indicator, item 3.7, omitted. This item was disregarded because it was used only to collect and categorize the responses to questions in relation **brand loyalty** into two groups, namely: loyalty to other athletic footwear brands; and loyalty to Reebok.

The number of extracted factors and the total variance explained by these extracted factors are shown in Table 5.9. The resulting factor model explained 55.90 % of the variance in the 41 items used in this research, and it captured 10 factors (with the eigenvalues greater than 1) and not 11 as originally proposed. These results signaled that some items might be multidimensional ones measuring more than one construct simultaneously (Hair et al. 1998).

To identify multi-dimensional items, all 41 items measuring 11 constructs were analyzed simultaneously to examine whether each of them was uni-dimensional or a pure item, and whether it captured the underlining characteristics of the construct. The measures with factor loadings of 0.30 or greater on only one factor are taken to be uni-dimensional

and those with high loadings on more than one factor are noted as being multi-dimensional (Coakes & Steed 2001). The corresponding factor loadings of these items, the pattern matrix, and the factor correlation matrix are presented in Table 5.10 and 5.11 respectively.

Overall, the results indicated that the measures for 9 constructs were uni-dimensional as proposed. These constructs included **price consciousness, deal proneness, need for cognition, market (price) mavenism, value consciousness, loyalty to other athletic footwear brands, variety seeking, motivation to conform to expectations of reference groups** , and **attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**. All items measuring each of these constructs had their highest factor loadings ( $\geq 0.30$ ) on only one factor. The cross loadings of the measures of these constructs on other factors were very low.

However, the factor loadings of item 3.12 '*I will buy other lower priced athletic footwear than the higher priced one, but the lower priced footwear must meet certain quality requirements.*' for **value consciousness** (0.242), and item 3.28 '*My friends or my family think that purchasing a pair of the seasonally discounted Reebok athletic footwear would damage their self-image (r)*' for '**attitudes of reference groups**' (0.253) were slightly below 0.30, indicating that these two items could only be marginally accepted as pure measures. The issue of uni-dimensionality of these two items will be further assessed in the next section of factor analysis (section 5.5.2) and the analytical results will be addressed in the same section.

In addition, factor 1 was found to consist of not only all four items measuring **market (price) mavenism** but also the other two items of **innovativeness** (item 3.10 and 3.25), signaling that these two constructs might be insufficiently distinct. This could plausibly exist because innovators tend to have greater mobility, greater social participation, higher opinion leadership (Gatignon & Robertson 1985; Mahajan, Muller & Bass 1990; Peter & Olson 2002), and better-developed knowledge structures for particular product categories than other consumers (Hirschman 1980; Peter & Olson 2002). Therefore, applying these justifications to the athletic footwear context, innovative consumers are likely to be market (price) mavens and vice versa.

**Table 5.9- Total variance explained by the extracted factors**

Factors	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total
1	5.298	12.922	12.922	3.652	8.907	8.907	3.553
2	3.365	8.208	21.130	2.717	6.626	15.533	1.784
3	3.146	7.672	28.802	2.541	6.197	21.730	2.246
4	2.188	5.338	34.140	2.306	5.624	27.354	2.878
5	2.027	4.943	39.083	1.888	4.606	31.959	2.176
6	1.913	4.665	43.748	1.460	3.561	35.520	2.559
7	1.591	3.879	47.627	1.045	2.548	38.069	1.868
8	1.248	3.043	50.670	0.719	1.754	39.823	1.110
9	1.102	2.687	53.358	0.546	1.333	41.156	1.559
10	1.041	2.539	55.896	0.466	1.136	42.291	2.021
11	0.989	2.413	58.310				
12	0.943	2.299	60.608				
13	0.911	2.223	62.831				
14	0.856	2.087	64.918				
15	0.825	2.013	66.931				
16	0.819	1.998	68.929				
17	0.786	1.917	70.846				
18	0.744	1.814	72.660				
19	0.717	1.749	74.409				
20	0.683	1.667	76.076				
21	0.672	1.639	77.715				
22	0.621	1.515	79.230				
23	0.590	1.439	80.669				
24	0.584	1.425	82.093				
25	0.578	1.409	83.502				
26	0.550	1.341	84.843				
27	0.546	1.331	86.173				
28	0.522	1.274	87.447				
29	0.500	1.219	88.666				
30	0.477	1.162	89.828				
31	0.459	1.119	90.947				
32	0.453	1.106	92.052				
33	0.427	1.041	93.093				
34	0.406	0.990	94.083				
35	0.396	0.967	95.050				
36	0.383	0.934	95.984				
37	0.363	0.886	96.870				
38	0.359	0.876	97.746				
39	0.328	0.800	98.546				
40	0.319	0.778	99.324				
41	0.277	0.676	100.000				

Extraction method: Maximum Likelihood  
Source: Analysis of survey data



**Table 5.10- Pattern matrix for all 41 indicators measuring *psychographic* and *normative influencing variables***

Proposed item membership	Factors									
	1	2	3	4	5	6	7	8	9	10
<b>Scale 1- Price consciousness</b>										
3.1. When buying a pair of athletic footwear, I rely heavily on the lowest priced one.	-0.047	0.092	-0.071	0.034	0.037	<b>0.580</b>	0.007	0.088	-0.068	0.138
3.11. I will willingly spend extra time to find the lowest priced athletic footwear.	0.156	-0.002	0.075	0.097	-0.029	<b>0.577</b>	0.092	-0.133	0.010	0.054
3.19. I compare prices in order to find the lowest priced athletic footwear.	-0.002	0.031	0.150	0.151	0.054	<b>0.549</b>	0.047	-0.092	0.177	-0.051
3.38. When buying a pair of athletic footwear, it is necessary for me to buy the lowest priced athletic footwear.	0.126	-0.031	-0.054	0.005	0.047	<b>0.672</b>	-0.077	0.241	-0.076	0.081
<b>Scale 2- Deal proneness</b>										
3.6. Discounting programs play a big part in my purchase decisions when buying a pair of athletic footwear.	0.060	0.027	0.111	<b>0.370</b>	0.025	0.258	0.086	-0.071	-0.009	-0.099
3.15. I am more likely to buy a pair of athletic footwear that are on sale.	0.069	0.031	0.103	<b>0.507</b>	0.103	0.285	-0.029	-0.119	-0.033	-0.085
3.23. When I buy a pair of athletic footwear that is on sale, I feel that I am getting a good deal.	-0.007	-0.022	-0.007	<b>0.682</b>	0.064	0.032	0.001	0.094	0.046	-0.039
3.31. Buying a pair of discounted athletic footwear makes me feel good.	-0.032	-0.023	0.138	<b>0.605</b>	-0.037	0.193	-0.046	0.021	0.009	-0.150
<b>Scale 3-Need for cognition</b>										
3.5. I think that deliberate thinking is necessary for buying a pair of athletic footwear.	0.059	-0.014	0.195	-0.082	0.015	0.080	-0.004	-0.056	-0.017	<b>0.440</b>
3.21. When buying a pair of athletic footwear, I do require much thought.	-0.034	0.080	0.130	0.050	0.016	0.057	-0.001	0.102	0.152	<b>0.571</b>
3.27. I find it especially satisfying to have a deliberate thought when buying a pair of athletic footwear.	0.066	-0.040	0.172	-0.001	-0.009	0.043	0.034	-0.033	0.065	<b>0.524</b>
<b>Scale 4- Market (price) mavenism</b>										
3.2. For athletic footwear products, I would be better able than most people to tell someone where to shop for discounted athletic footwear.	<b>0.709</b>	-0.016	0.099	0.089	0.012	-0.009	-0.066	0.158	-0.032	-0.069
3.9. People think of me as a good source of information of discounting programs of athletic footwear products.	<b>0.763</b>	0.007	-0.050	-0.002	-0.066	0.031	-0.018	-0.056	0.036	0.043
3.18. I like helping people by providing them with information of discounting programs of athletic footwear products.	<b>0.709</b>	0.081	-0.013	0.070	0.018	-0.008	0.057	-0.231	0.038	0.012
3.41. I am an expert when it comes to suggesting places to shop for discounted athletic footwear products.	<b>0.762</b>	-0.036	0.044	0.023	0.059	0.044	-0.077	0.001	-0.057	-0.054
<b>Scale 5- Quality consciousness</b>										
3.20. When buying a pair of athletic footwear, I will give up high quality for a lower price (r).	0.101	0.089	0.068	-0.026	0.021	<b>-0.483</b>	-0.038	0.110	-0.019	0.118
3.22. I think that the higher the price of athletic footwear, the higher the quality.	-0.085	<b>-0.556</b>	0.054	0.014	0.004	-0.017	0.003	-0.007	0.102	0.004
3.29. I am willing to pay a bit more for the best quality athletic footwear.	0.107	-0.011	<b>0.405</b>	0.067	0.052	-0.332	-0.056	0.005	0.203	0.044
3.34. I believe that a price of athletic footwear products is a good indicator of product quality.	0.036	<b>-0.978</b>	0.008	0.053	0.030	0.037	-0.068	-0.119	-0.084	0.016

**Table 5.10- continued**

Proposed item membership	Factors									
	1	2	3	4	5	6	7	8	9	10
<b>Scale 6- Value consciousness</b>										
3.8. When buying a pair of athletic footwear, I will try to maximize the quality I get for the money I spend.	0.020	-0.070	<b>0.444</b>	-0.050	-0.050	0.067	0.031	0.017	-0.043	0.110
3.12. I will buy other lower priced athletic footwear than the higher priced one, but the lower priced footwear must meet certain quality requirements.	0.027	0.077	<b>0.242</b>	0.039	-0.066	0.232	0.053	-0.094	0.032	0.113
3.30. When buying a pair of athletic footwear, it is necessary for me to think about the low price and the quality at the same time.	-0.016	0.002	<b>0.616</b>	0.000	0.010	-0.097	0.011	-0.009	0.051	0.143
3.39. When buying a pair of athletic footwear, I will ensure that I get the best value from the money I spend.	0.042	0.022	<b>0.453</b>	0.060	0.007	-0.043	0.021	0.030	0.022	0.250
<b>Scale 7- Loyalty to other athletic footwear brands</b>										
3.16. I will buy only my most favorite brand of athletic footwear.	0.049	-0.071	0.017	-0.054	-0.031	0.074	0.048	0.210	<b>0.368</b>	-0.051
3.32. If my most favorite brand of athletic footwear is <u>not</u> available at a shopping outlet, I will choose another athletic footwear brand. (r)	-0.072	-0.034	-0.064	0.043	-0.080	-0.033	-0.062	-0.062	<b>0.547</b>	0.034
3.42. If my most favorite brand of athletic footwear is <u>not</u> available at a shopping outlet, I will search for it at other outlets	0.075	-0.001	0.047	-0.015	0.045	0.001	-0.052	-0.048	<b>0.491</b>	0.047
<b>Scale 8- Variety seeking</b>										
3.4. I do get bored from the use of the same athletic footwear brands over and over again.	0.056	-0.091	-0.078	-0.107	<b>0.583</b>	0.080	0.041	-0.109	0.020	0.062
3.14. I will buy different athletic footwear brands to reduce my boredom.	0.020	0.054	-0.100	-0.076	<b>0.833</b>	0.040	0.042	-0.246	0.052	-0.035
3.24. Purchasing some different athletic footwear brands from time to time makes me feel better.	-0.079	-0.005	0.059	0.113	<b>0.547</b>	-0.051	-0.005	0.112	-0.069	-0.011
3.40. I buy different athletic footwear brands to get some variety.	0.034	0.012	0.065	0.080	<b>0.718</b>	-0.038	-0.034	0.167	-0.053	-0.021
<b>Scale 9-Innovativeness</b>										
3.10 I am often the first person in my friends or my family to purchase a new athletic footwear model.	<b>0.479</b>	-0.093	-0.105	-0.033	0.043	-0.097	0.053	0.257	0.100	0.128
3.25 I am interested in the information about new models of athletic footwear.	<b>0.399</b>	-0.009	0.093	-0.071	0.093	-0.009	0.096	0.144	0.126	0.125
3.37 When buying a pair of athletic footwear, I pay more attention to new athletic footwear models than the current ones.	0.084	-0.126	0.114	0.043	0.103	-0.051	0.094	0.226	<b>0.248</b>	-0.007

**Table 5.10- continued**

Proposed item membership	Factors									
	1	2	3	4	5	6	7	8	9	10
<b>Scale 10- Motivation to conform to the expectations of reference groups</b>										
3.3. It bothers me if my friends or my family disapprove of my purchase of athletic footwear products.	-0.099	0.061	-0.105	0.000	0.082	0.059	<b>0.473</b>	0.062	0.068	0.105
3.13. My purchase decisions in relation to athletic footwear products depend on how my friends or my family wish me to behave.	0.041	0.039	0.138	0.027	0.019	-0.024	<b>0.548</b>	-0.126	-0.065	-0.067
3.26. It is important to me to fit in with what my friends or my family think about a purchase of athletic footwear.	-0.040	-0.042	0.035	0.012	-0.035	-0.027	<b>0.726</b>	0.015	-0.090	-0.027
3.35. I am concerned about how my friends or my family make judgments about me by the athletic footwear that I buy.	0.081	-0.284	-0.057	0.056	0.006	-0.023	<b>0.394</b>	0.148	0.010	0.016
<b>Scale 11-Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear</b>										
3.17. My friends or my family think that they would be embarrassed to buy a pair of the seasonally discounted Reebok athletic footwear.(r)	-0.121	0.032	0.037	<b>0.362</b>	-0.025	-0.095	-0.128	-0.155	-0.122	0.274
3.28. My friends or my family think that purchasing a pair of the seasonally discounted Reebok athletic footwear would damage their self-image. (r)	-0.112	0.064	0.114	<b>0.253</b>	0.017	-0.175	-0.195	-0.245	-0.001	0.141
3.33. My friends or my family think that it is smart to buy a pair of the seasonally discounted Reebok athletic footwear.	0.084	-0.071	-0.119	<b>0.685</b>	0.001	-0.054	0.055	0.019	-0.005	0.103
3.36. My friends or my family think that they like to buy a pair of the seasonally discounted Reebok athletic footwear.	0.238	-0.022	-0.148	<b>0.464</b>	-0.034	-0.030	0.193	-0.049	0.034	0.126
<b>Percent of variance accounted for each factor</b>										
<b>Total variance explained by 10 extracted factors = 55.90%</b>										
	<b>12.92</b>	<b>8.21</b>	<b>7.67</b>	<b>5.34</b>	<b>4.94</b>	<b>4.67</b>	<b>3.88</b>	<b>3.04</b>	<b>2.69</b>	<b>2.54</b>

Source: Analysis of survey data  
(r) = reversed item

**Table 5.11- Factor correlation matrix**

Factor	1	2	3	4	5	6	7	8	9	10
<b>1</b>	1.000									
<b>2</b>	-0.146	1.000								
<b>3</b>	0.148	0.019	1.000							
<b>4</b>	0.151	-0.019	0.181	1.000						
<b>5</b>	0.154	-0.080	-0.007	0.089	1.000					
<b>6</b>	0.092	0.042	0.031	0.207	0.050	1.000				
<b>7</b>	0.205	-0.147	-0.025	0.047	0.155	0.206	1.000			
<b>8</b>	0.155	-0.215	-0.090	-0.185	0.100	-0.045	0.114	1.000		
<b>9</b>	0.226	-0.261	0.167	-0.004	0.009	-0.041	0.055	0.134	1.000	
<b>10</b>	0.151	0.093	0.393	0.102	0.025	-0.034	0.018	-0.023	0.167	1.000

Source: Analysis of survey data

As **market (price) mavenism** and **innovativeness** might be related, it was decided to assess whether these two scales had limitations in terms of convergent and discriminant validity. The correlations between the items measuring these two constructs were analyzed, and the results of this correlation analysis are summarized in Table 5.12.

**Table 5.12- Correlation matrix of the measures of market (price) mavenism and innovativeness**

Variables	Items	3.10	3.25	3.37	3.2	3.9	3.18	3.41
Innovativeness	3.10	1.000	0.369	0.317	0.428	0.420	0.301	0.387
Innovativeness	3.25		1.000	0.281	0.359	0.327	0.337	0.404
Innovativeness	3.37			1.000	0.175	0.163	0.009	0.169
Market (price) mavenism	3.2				1.000	0.556	0.481	0.594
Market (price) mavenism	3.9					1.000	0.542	0.556
Market (price) mavenism	3.18						1.000	0.537
Market (price) mavenism	3.41							1.000

Source: Analysis of survey data

This correlation matrix showed that the items measuring **market (price) mavenism** had both convergent and discriminant validity because the convergent correlations were higher than the discriminant ones (Churchill 1979; Trochim 2002). However, this is not the case for **innovativeness** where the discriminant correlations were found to be higher than the convergent correlations, suggesting that these items might not effectively measure the characteristic of **innovativeness** and in turn might be invalid (Churchill 1979; Trochim 2002). This limitation could reduce internal validity of the findings of this research, particularly in relation to the variable of **innovativeness** (Cooper & Schindler 2001). The research findings in relation to this construct (**innovativeness**), to be discussed in this thesis from this point, will be carefully interpreted and the limitation regarding the issues of validity will be noted.

In addition, the measures for **innovativeness** did not appear to be perfectly uni-dimensional, and this limitation was also noted for the scale of **quality consciousness** (from Table 5.10). In respect of the 3 items measuring **innovativeness**, two of them could be viewed as a uni-dimensional because they had the highest loadings on the same factor (factor 1). These items included item 10 *'I am often the first person in my friends or my family to purchase a new athletic footwear model.'* and item 25 *'I am interested in the information about new models of athletic footwear.'* with the factor loadings of 0.479 and 0.399 respectively. On the other hand, item 3.37 *'When buying a pair of athletic footwear, I pay more attention to new athletic footwear models than the current ones.'*, was found to have the highest cross loading of 2.48 on factor 9. This factor was mainly

comprised of the items measuring the construct of **loyalty to other athletic footwear brands**. This suggested that, as a whole, the measures for **innovativeness** might not be uni-dimensional, particularly, item 3.37 which may not effectively capture the meaning of this construct.

In relation to the 4 items measuring **quality consciousness**, two items could be considered uni-dimensional as they had the highest loadings on the same factor (factor 2). These two items were item 3.22 *'I think that the higher the price of athletic footwear, the higher the quality.'* and item 3.34 *'I believe that a price of athletic footwear products is a good indicator of product quality.'*, with the factor loadings of -0.556 and -0.978, respectively. Whilst the other two items, item 3.20 *'When buying a pair of athletic footwear, I will give up high quality for a lower price (r).'* and item 3.29 *'I am willing to pay a bit more for the best quality athletic footwear.'* were found to have the highest factor loadings of -0.483 and 0.405 on factor 6 and factor 3 respectively. These two factors were mainly comprised of the items measuring **price consciousness** and **value consciousness** respectively. Due to the cross loadings of these two items, the measures for **quality consciousness** might be multi-dimensional. Particularly, items 3.20 and 3.29 were unlikely to effectively measure the meaning of this construct.

Lastly, the relationships between the extracted factors were analyzed. The results from the factor correlation matrix (Table 5.11) illustrated that all factors appeared only slightly related, indicating that each factor was somewhat unique.

In brief, this section discussed how the measures were primarily explored to determine whether they were sufficiently valid and uni-dimensional using exploratory factor analysis with all 41 items inputted. The results indicated nine out of eleven constructs as uni-dimensional, and these nine constructs included **price consciousness, deal proneness, need for cognition, market (price) mavenism, value consciousness, loyalty to other athletic footwear brands, variety seeking, motivation to conform to expectations of reference groups**, and **attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**. On the other hand, the scales of **quality consciousness** and **innovativeness** were found to be multi-dimensional.

In terms of the issue of validity, the scale of **innovativeness** was found not to have convergent and discriminant validity. These qualities of this scale could adversely affect internal validity of the findings of this research, particularly in relation to the construct of **innovativeness** (Cooper & Schindler 2001). This limitation in terms of scale validity will be noted when interpreting the research findings particularly in relation to this construct.

After this initial factor analysis with all 41 items inputted simultaneously, confirmatory factor analysis will be conducted for each of these scales in order to have a closer assessment of the issues of dimensionality and reliability, and to refine the measures. The results of this analysis are now discussed.

### **5.5.2 Confirmatory factor analysis for each construct**

In this section, confirmatory factor analysis was conducted for each scale using the root one criterion in order to determine whether the items for each scale were unidimensional and reliable. The number of extracted factor was specified to be 1 for this analysis in order to determine the loadings of each item on the single extracted factor. Poor items were identified and then deleted to improve the measures. As all items were of importance to this research, item deletion was done very carefully. Poor items to be deleted included those with low factor loadings (lower than 0.30), and those found to have high cross-loadings on other extracted factors in the initial exploratory factor analysis (section 5.5.1). In addition, reliability was estimated for each scale using the values of Cronbach alpha and suggestions of improvement by Cronbach's alpha if item deleted were used for identifying and deleting unreliable items.

Confirmatory factor analysis began with the assessment on the overall significance of the correlation matrix and the adequacy of the statement relationships of each scale using two key correlation tests, namely: the Bartlett test of sphericity for the correlation matrix and the test of Kaiser-Meyer-Olkin (KMO). The results of these tests are summarized in Table 5.13.

**Table 5.13- The results of Bartlett test of sphericity for the correlation matrix (BTS) and the test of Kaiser-Meyer-Olkin (KMO)**

Scales	BTS			KMO
	Chi-square $\chi^2$	Degree of freedom	Significance level (p value)	
Price consciousness	411.373	6	0.000	0.704
Deal proneness	452.264	6	0.000	0.738
Need for cognition	245.348	3	0.000	0.654
Market (price) mavenism	726.225	6	0.000	0.795
Quality consciousness	220.538	6	0.000	0.510
Value consciousness	264.055	6	0.000	0.671
Loyalty to other athletic footwear brands	96.139	3	0.000	0.599
Variety seeking	514.798	6	0.000	0.725
Innovativeness	184.028	3	0.000	0.639
Motivation to conform to expectations of reference groups	247.666	6	0.000	0.687
Attitudes of reference groups to seasonally discounted Reebok athletic footwear	317.096	6	0.000	0.514

Source: Analysis of the survey data

From Table 5.13, the Bartlett tests of sphericity for the correlation matrix indicated a significance level of p for each of these scales ( $p = 0.000$ ), suggesting the adequacy of the magnitude of the correlations of the items measuring each of these constructs (Hair et al. 1998). In addition, the KMO for all of these scales, excluding those of **quality consciousness, loyalty to other athletic footwear brands, and ‘attitudes of reference groups’**, were greater than 0.6, indicating sufficient relationships among the measures for each of these constructs. These scales were therefore considered appropriate for factor analysis (Tabacknick & Fidell 1996). On the other hand, there might be insufficient relationships among the items of the three constructs with the KMO below 0.60, and the data in relation to these three constructs might not be suitable for factor analysis (Tabacknick & Fidell 1996).

Based on the results of these tests, only the items measuring **quality consciousness, loyalty to other athletic footwear brands, and ‘attitudes of reference groups’** might be inappropriate to proceed with the confirmatory factor analysis. Having taken this limitation into account, the researcher continued to perform factor analysis for each of these constructs and the results of these analyses will be discussed next commencing with the **price consciousness** scale.

#### **The price consciousness measure**

The **price consciousness** measure consisted of four items (items 3.1, 3.11, 3.19, and 3.38). These items were found to be uni-dimensional and valid in the initial factor

analysis with all 41 items inputted (section 5.1.1). In this section, confirmatory factor analysis was performed only for these four items to determine the uni-dimensionality and reliability of this scale, and the results are summarized in Table 5.14.

**Table 5.14- Summary of confirmatory factor analysis for price consciousness**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.1	0.715	0.672
3.11	0.637	0.610
3.19	0.574	0.650
3.38	0.541	0.655
Cronbach's Alpha = 0.710		

Extraction Method: Maximum Likelihood

Source: Analysis of survey data

The results showed good factor loadings for all four items (factor loadings greater than 0.30) (Coakes & Steed 2001). This supported the initial factor analysis that indicated the **price consciousness** scale was uni-dimensional. In addition, the resulting Cronbach alpha of 0.710 was greater than the desirable level of 0.70, indicating that these items were reliable (Churchill 1979; Hair et al., 1998; Nunally 1997). From the column 'Alpha if item deleted' in Table 5.14, item deletion did not improve the scale's reliability and therefore deletion of items was unnecessary. As a result, all of these four items were considered to be a good measure for **price consciousness** and all were retained in the analysis.

### **The deal proneness measure**

**Deal proneness** was measured using four items and they included items 3.6, 3.15, 3.23, and 3.31. These four items were found to be uni-dimensional and valid, based on the results of initial factor analysis with all 41 items included. Confirmatory factor analysis was performed only for these four items in this section to determine the uni-dimensionality and reliability of this scale specifically and the results are summarized in Table 5.15.

**Table 5.15- Summary of confirmatory factor analysis for deal proneness**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.6	0.757	0.693
3.15	0.626	0.614
3.23	0.607	0.693
3.31	0.577	0.672
Cronbach's Alpha = 0.730		

Extraction Method: Maximum Likelihood

Source: Analysis of survey data



The factor loadings shown in Table 5.15 were above 0.30 and the resulting Cronbach alpha of 0.730 was also above the desirable level (0.70), indicating that these measures were both uni-dimensional (Coakes & Steed 2001) and reliable (Churchill 1979; Hair et al., 1998; Nunally 1997). In addition, from the column ‘Alpha if item deleted’ in Table 5.15, deletion of any of these items did not help to improve the scale’s reliability. Thus, all of these items could be said to be good measures for **deal proneness** and all were retained in the analysis.

### **The need for cognition measure**

Three items were employed to assess **need for cognition** and they included items 3.5, 3.21, and 3.27. These items were considered to be uni-dimensional and valid measures in the initial factor analysis with all 41 items inputted. They were further analyzed in this section to determine the uni-dimensionality and reliability of this scale using confirmatory factor analysis, and the results are summarized in Table 5.16.

**Table 5.16- Summary of confirmatory factor analysis for need for cognition**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.5	0.554	0.626
3.21	0.711	0.524
3.27	0.641	0.565
Cronbach’s Alpha = 0.668		

Extraction Method: Maximum Likelihood  
Source: Analysis of survey data

The resulting factor loadings of these items were greater than 0.30, supporting the initial factor analysis that indicated these measures as uni-dimensional (Coakes & Steed 2001). Although the resulting Cronbach alpha of 0.668 was not above the desirable level (0.70), however it was also not below the lowest acceptable level for Cronbach’s alpha in exploratory research (0.60) (Hair et al. 1998). This scale was therefore considered marginally acceptable in terms of its scale reliability. In addition, values shown in the column ‘Alpha if item deleted’ in Table 5.16 suggested that item deletion did not help to increase the scale’s reliability. These three items were therefore considered to be a good measure for **need for cognition** and they should be included in the analysis.

### **The market (price) mavenism measure**

**Market (price) mavenism** was measured by four items (items 3.2, 3.9, 3.18, and 3.41). These items were uni-dimensional and valid based on the results of initial factor analysis

with all 41 items included. In this section, confirmatory factor analysis was conducted for these four items to determine the uni-dimensionality and reliability of this scale, and the results are summarized in Table 5.17.

**Table 5.17- Summary of confirmatory factor analysis for market (price) mavenism**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.2	0.718	0.774
3.9	0.761	0.754
3.18	0.660	0.793
3.41	0.766	0.752

Cronbach's Alpha = 0.816

Extraction Method: Maximum Likelihood

Source: Analysis of survey data

The factor loadings for all items in this measure (shown in Table 5.17) were above 0.30 and the resulting Cronbach alpha of 0.816 was also greater than the desirable level (0.70), supporting that these measures were both uni-dimensional (Coakes & Steed 2001) and reliable (Churchill 1979; Hair et al., 1998; Nunally 1997). In addition, values from the column 'Alpha if item deleted' in Table 5.17 suggested that item deletion would adversely affect the scale's reliability. Hence, all of these items were deemed to be good measures for **market (price) mavenism**, and as a result, they finally remained in the analysis.

### **The quality consciousness measure**

Four items used to measure **quality consciousness** included items 3.20, 3.22, 3.29, and 3.34. These measures were found to be multi-dimensional in the initial factor analysis with all 41 items included. Particularly, items 3.20 and 3.29 were found to have the cross loadings on the factor of **price consciousness** and **value consciousness** respectively. To have a closer assessment of this scale, only these four items were assessed in this section using confirmatory factor analysis. The analytical results are summarized in Table 5.18.

**Table 5.18- Summary of confirmatory factor analysis for quality consciousness**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.20 r*	-0.127	0.501
3.22	0.880	0.155
3.29	0.073	0.294
3.34	0.582	0.105

Cronbach's Alpha = 0.354

Extraction Method: Maximum Likelihood

\* r= reversed item

Source: Analysis of survey data

The resulting factor loadings shown in Table 5.18 indicated only the items 3.22 and 3.34 were uni-dimensional (the factor loadings above 0.30). On the other hand, items 3.20 and 3.29 were unlikely to be uni-dimensional as their factor loadings were below 0.30 (Coakes & Steed 2001). These results supported the initial factor analysis suggesting items 3.20 and 3.29 were poor measures in relation to the issue of uni-dimensionality. These two items might be appropriate to be deleted to improve factor loadings of the remaining items.

In terms of the scale's reliability, this scale was found to be unreliable as the Cronbach alpha of 0.354 was below the minimum acceptable level (0.60) (Churchill 1979; Hair et al., 1998; Nunally 1997). In addition, values from the column 'Alpha if item deleted' in Table 5.18 suggested the deletion of item 3.20 for improving scale reliability of the remaining items of this **quality consciousness** scale.

To identify poor item(s) to be deleted, suggestions from both the factor loading values and the values of Cronbach alpha were taken into account. In respect to the factor loading values, item 3.29 should be deleted as this item had the lowest factor loading on the extracted factor (0.073). However, deleting this item would reduce the scale reliability from 0.354 to 0.294. Deleting item 3.20 would be more suitable when focusing on the Cronbach alpha only as this would increase the scale reliability by 0.150. However, this item had a higher factor loading value than item 3.29.

As these suggestions could not provide a concrete solution for selecting which item(s) to delete, it was therefore decided to perform three steps of item deletions. Firstly, only item 3.20 was removed, followed by deleting only item 3.29, and lastly by deleting both items simultaneously. Confirmatory factor analysis was re-conducted for the remaining items in each step. The results of these analyses are summarized in Table 5.19 and were used to appropriately select and delete poor items. The first column of this table indicates the original four items used to measure **quality consciousness**. The next three columns indicate the estimated factor loadings of the remaining items after the deletion of the item suggested in each step. The last three columns indicate Cronbach alpha if the item deleted, and the Cronbach alpha for the construct after the deletion of the item suggested in each step.

**Table 5.19- Summary of confirmatory factor analysis after deleting item(s)**

Items	Factor loadings on the extracted factor			Alpha if item deleted		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
3.20 r*	Deleted	-0.135	Deleted	Deleted	0.676	Deleted
3.22	0.690	0.861	NP	0.124	0.146	NP
3.29	0.099	Deleted	Deleted	0.675	Deleted	Deleted
3.34	0.739	0.594	NP	0.114	0.206	NP
Cronbach's Alpha				0.501	0.495	0.675

Extraction Method: Maximum Likelihood

\* r= reversed item

NP= 2 items were unable to be deleted simultaneously and the extraction was terminated due to the problem of 'Not positive definite matrix'.

Source: Analysis of survey data

Based on the results of these factor analyses, it was still not clearly seen which item(s) should be deleted. From the results of 'Step 1' confirmatory factor analysis, after deleting item 3.20, the scale's reliability was improved from 0.354 to 0.501. In addition, item 3.29 was the other poor item with a very low factor loading of 0.099, and deleting item 3.29 would improve the scale's reliability from 0.501 to 0.675. However, when continuing to delete 3.29, the extraction was terminated due to the problem of 'Not positive definite matrix' and factor loadings could not further be estimated. As a result, factor analysis with items 3.20 and 3.29 deleted could not be accomplished.

From the results of 'Step 2' confirmatory factor analysis, after deleting item 3.29, the scale's reliability was increased from 0.354 to 0.495. In addition, item 3.20 was still found to have the low factor loading (-0.135), and deleting this item would improve the scale reliability from 0.495 to 0.676. Similar to the 'Step 1' confirmatory factor analysis, the problem of 'Not positive definite matrix' existed when attempting to delete both items 3.29 and 3.20.

As two items could not be deleted simultaneously, finally, it was decided to follow the 'Step 1' confirmatory factor analysis due to the higher achieved Cronbach alpha (0.501) compared to that of the 'Step 2' confirmatory factor analysis (0.495). As a result, item 3.20 was removed, and the other three remaining items (items 3.22, 3.29, and 3.34) were retained in the analysis.

The issues of uni-dimensionality of item 3.29 and reliability of this scale could distort the research findings (Cooper & Schindler 2001). This was noted as a limitation of this

**quality consciousness** measure and the interpretation of the findings of this research in relation to this construct will be carefully done with this limitation noted.

**The value consciousness measure**

Four items were used to measure **value consciousness**, and they included items 3.8, 3.12, 3.30, and 3.39. The results of the initial exploratory factor analysis signaled that item 3.12 might not be perfectly uni-dimensional due to its factor loading value slightly below 0.30, and in order to examine the structure of this measure, confirmatory factor analysis was conducted. The results are summarized in Table 5.20.

**Table 5.20- Summary of confirmatory factor analysis for value consciousness**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.8	0.510	0.487
3.12	0.322	0.629
3.30	0.653	0.501
3.39	0.679	0.485

Cronbach’s Alpha = 0.593  
 Extraction Method: Maximum Likelihood  
 Source: Analysis of survey data

The resulting factor loadings of these four measures were above 0.30, confirming that all of these four items were sufficiently uni-dimensional (Coakes & Steed 2001) to be retained in the scale. The Cronbach’s alpha of this scale of 0.593 was below the acceptable level of 0.60 (Churchill 1979; Hair et al., 1998; Nunally 1997), but only slightly. Results suggested that deleting item 3.12 would help improve the scale reliability of the remaining items from 0.593 to 0.629. This reliability improvement was considered marginal and therefore as all items were considered acceptable in terms of both uni-dimensionality and reliability, it was decided to retain all of these four items in the analysis.

**The loyalty to other athletic footwear brands measure**

**Loyalty to other athletic footwear brands** was measured using three items, which included items 3.16, 3.32, and 3.42. All of these three items were seen to be uni-dimensional in the initial factor analysis. To confirm whether these items should be retained in the analysis, the uni-dimensionality and reliability of this scale were further assessed in this section using confirmatory factor analysis, and the results are summarized in Table 5.21.

**Table 5.21- Summary of confirmatory factor analysis for Loyalty to other athletic footwear brands**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.16	0.409	0.457
3.32 r*	0.601	0.329
3.42	0.496	0.391
Cronbach's Alpha = 0.490		

Extraction Method: Maximum Likelihood

\*r = reversed items

Source: Analysis of survey data

The results showed fair factor loadings for all three items (factor loadings greater than 0.30), confirming the uni-dimensionality of this scale (Coakes & Steed 2001). However, the achieved Cronbach alpha of 0.490 was lower than the minimum acceptable level (0.60), and this indicated a limitation in terms of reliability of this scale (Churchill 1979; Hair et al., 1998; Nunally 1997). Values from the column 'Alpha if item deleted' in Table 5.21 were used to identify and delete possible unreliable items, and it was found that deletions of any items from this scale did not improve the scale's reliability. Therefore, none of these three items were deleted from the scale of **loyalty to other athletic footwear brands**. The issue of reliability of this scale might distort the research findings in relation to this construct (Cooper & Schindler 2001), and this will be taken into account as a limitation of this measure and this research.

### **The variety seeking measure**

The **variety seeking** measure consisted of four items (items 3.4, 3.14, 3.24, and 3.40). All of these four items were primarily considered uni-dimensional in the initial factor analysis with all 41 items inputted. To further determine whether they were good items and should be kept in the analysis, a closer assessment on the issues of uni-dimensionality and reliability was conducted for this scale specifically using confirmatory factor analysis, and the results are summarized in Table 5.22.

**Table 5.22- Summary of confirmatory factor analysis for variety seeking**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.4	0.595	0.714
3.14	0.795	0.616
3.24	0.519	0.732
3.40	0.701	0.654
Cronbach's Alpha = 0.742		

Extraction Method: Maximum Likelihood

Source: Analysis of survey data

The resulting factor loadings of these items were well above the desirable level of 0.30, and the resulting Cronbach alphas were also greater than the acceptable level of 0.60. These indicated that this scale was both uni-dimensional (Coakes & Steed 2001) and reliable (Churchill 1979; Hair et al., 1998; Nunally 1997). Values from the column ‘Alpha if item deleted’ in Table 5.22 were used to identify potential items to be deleted in order to improve the scale’s reliability. However, none of these four items were suggested to be removed. Therefore, all of these four items were considered as a good measure for **variety seeking**, and all were included in the analysis.

### **The innovativeness measure**

Three items were used to capture the meaning of **innovativeness** and these items included items 3.10, 3.25, and 3.37. As discussed in the initial factor analysis, this scale was found to have limitations in terms of scale validity and uni-dimensionality due to the higher discrimination correlations than convergent correlations of this measurement, and the loadings of these items on more than one factor (factors 1 and 9). To further determine whether these items were sufficiently uni-dimensional and reliable, and whether they should remain in the analysis, confirmatory factor analysis was conducted specifically for this scale. The results of this analysis are summarized in Table 5.23.

**Table 5.23- Summary of confirmatory factor analysis for innovativeness**

<b>Items</b>	<b>Factor loadings on the extracted factor</b>	<b>Alpha if item deleted</b>
3.10	0.635	0.487
3.25	0.629	0.489
3.37	0.515	0.559

Cronbach’s Alpha = 0.612

Extraction Method: Maximum Likelihood

Source: Analysis of survey data

In contrast to the findings of initial factor analysis, the results showed good factor loadings for all three items (factor loadings greater than 0.30). These results indicate the uni-dimensionality of this scale (Coakes & Steed 2001).

It could be seen that, when allowed to load freely in the initial factor analysis, the items measuring innovativeness were found to load highly on the two factors that were comprised of the items measuring **market (price) mavenism** (factor 1) and **loyalty to other athletic footwear brands** (factor 9). However, when controlled to load on only one extracted factor in this confirmatory factor analysis, all of these three items were

found to be uni-dimensional. Based on these results, it could be concluded that there might be a common characteristic between **innovativeness** and these two *psychographics*, particularly **market (price) mavenism** and **loyalty to other athletic footwear brands**. Therefore, all of these items (items 3.10, 3.25, and 3.37) were found to capture the meaning of **innovativeness** and at the same time they could measure the characteristics of these two *psychographic*. This confirms the initial factor analysis that indicated the limitation in terms of scale validity of these measures. This limitation regarding scale validity will be noted when interpreting the results of this research specifically in relation to this construct.

In respect of the scale’s reliability, this scale was also found to be reliable since the achieved Cronbach alpha of 0.612 was above the acceptable of 0.60 (Churchill 1979; Hair et al., 1998; Nunally 1997). Values from the column ‘Alpha if item deleted’ in Table 5.23 suggested that deletion of any of these items would not help improve the scale’s reliability. All of these three items were considered an acceptable measure for the **innovativeness** scale, and they were not removed from the analysis.

**The motivation to conform to expectations of reference groups measure**

The scale of ‘**motivation to conform**’ was measured using four items and they included items 3.3, 3.13, 3.26, and 3.35. These four items were seen to be uni-dimensional measures in the initial factor analysis with all 41 items inputted. To further determine the appropriateness of the inclusion of these items in the analysis, confirmatory factor analysis was performed to measure uni-dimensionality and reliability of this scale. The results of this analysis are summarized in Table 5.24.

**Table 5.24- Summary of confirmatory factor analysis for ‘motivation to conform’**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.3	0.450	0.584
3.13	0.519	0.566
3.26	0.750	0.470
3.35	0.465	0.588
Cronbach’s Alpha = 0.624		

Extraction Method: Maximum Likelihood  
 Source: Analysis of survey data

The results supported the initial factor analysis suggesting all of these four items to be a good measure for the construct of ‘**motivation to conform**’. The resulting factor



loadings were well above 0.30, indicating the uni-dimensionality of this scale (Coakes & Steed 2001). The resulting Cronbach alpha of 0.624 was greater than 0.60, suggesting that these measures were sufficiently reliable (Churchill 1979; Hair et al., 1998; Nunally 1997). Values from the column ‘Alpha if item deleted’ in Table 5.24 suggested that no item deletion could be further made to improve the scale’s reliability. As a result, all of these four items were considered appropriate to be included in the analysis.

**The attitudes of reference groups towards the seasonally discounted Reebok athletic footwear measure**

Four items were used to measure the ‘attitudes of reference groups’ scale and they included items 3.17, 3.28, 3.33, and 3.36. From the initial factor analysis (section 5.5.1), items 3.17, 3.28, and 3.33 were considered to be pure measures, and item 3.28 was marginally accepted to be pure measure due to its factor loading slightly below 0.30 on this factor. To further determine the appropriateness of the inclusion of these items in the analysis, confirmatory factor analysis was performed to have a closer assessment on the issues of uni-dimensionality and reliability of this scale. The results of this analysis are summarized in Table 5.25.

**Table 5.25- Summary of confirmatory factor analysis for ‘attitudes of reference groups’**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.17 r*	0.280	0.438
3.28 r*	0.188	0.534
3.33	0.808	0.433
3.36	0.580	0.522

Cronbach’s Alpha = 0.556

Extraction Method: Maximum Likelihood

\*r = reversed item

Source: Analysis of survey data

The resulting factor loadings shown in Table 5.25 indicated only the items 3.33 and 3.36 to be uni-dimensional (the factor loadings above 0.30) with items 3.17 and 3.28 not found to be uni-dimensional as their factor loadings were below 0.30 (Coakes & Steed 2001). In terms of the scale’s reliability, this scale was found to be unreliable as the achieved Cronbach alpha of 0.556 was below the acceptable level (0.60) (Churchill 1979; Hair et al., 1998; Nunally 1997).

Factor loadings of each items and values from the column ‘Alpha if item deleted’ in Table 5.25 were used for identification of potentially poor item(s) which if deleted would improve uni-dimensionality and reliability of this scale. The factor loading of item 3.17 (0.280) was below the acceptable level (0.30) but only slightly, and deleting this item would actually reduce the scale reliability by 0.120. With these justifications, item 3.17 was considered to be an inappropriate item to be deleted.

Item 3.28 had the lowest factor loading (0.188) and deleting this item might improve the uni-dimensionality of this scale. In addition, deleting this item would reduce the scale’s reliability but only slightly. Item 3.28 was therefore removed, and the results of factor analysis are summarized in Table 5.26.

**Table 5.26- Summary of confirmatory factor analysis for ‘attitudes of reference groups’ with item 3.28 omitted**

Items	Factor loadings on the extracted factor	Alpha if item deleted
3.17 r*	0.250	0.649
3.28 r*	Deleted	Deleted
3.33	0.779	0.267
3.36	0.617	0.326
Cronbach’s Alpha = 0.534		

Extraction Method: Maximum Likelihood

\*r = reversed item

Source: Analysis of survey data

After deleting item 3.28, the resulting factor loadings of items 3.17 and 3.33, and the resulting Cronbach alpha for this scale dropped slightly, and the resulting factor loadings of item 3.36 increased slightly. Although values from the column ‘Alpha if item deleted’ in Table 5.26 suggested a further deletion of item 3.17 and this would improve the scale reliability from 0.534 to 0.649, deleting these two items (items 3.28 and 3.17) simultaneously from this scale could not be done due to the problem of ‘Not positive definite matrix’. As previously found in the analysis in relation to the **quality consciousness** scale, this problem resulted in this confirmatory factor analysis being unable to proceed.

Overall, the deletion of item 3.28 did not substantially help improve the uni-dimensionality and reliability of this scale. It was therefore decided to bring back item 3.28 and to retain all of these four items of ‘attitudes of reference groups’ in the analysis. In addition, the issues of uni-dimensionality (for items 3.17 and 3.28) and

reliability of this scale will be noted as a key limitation of this measure when interpreting the research findings in relation to this construct.

In brief, this section discussed how the measures for each construct were purified using confirmatory factor analysis. Reliability and uni-dimensionality of these scales were assessed to identify and delete poor items. As all items were of importance to this research, item deletions were done carefully. Finally, only one out of forty one items (item 3.20 from the **quality consciousness** scale) was removed from the analysis to improve the uni-dimensionality and reliability of the measures. Some items were found to be unreliable and/or multi-dimensional measures but they were still retained in the analysis as eliminating these poor items did not improve quality of the measures. These poor items included item 3.29 for **quality consciousness**, item 3.12 for **value consciousness**, items 3.16, 3.32 and 3.42 for **loyalty to other athletic footwear brands**, items 3.17 and 3.28 for **attitudes of reference groups to the seasonally discounted Reebok athletic footwear**. Further, the inclusion of these items was initially supported by the extant literature and to remove them simply to gain only marginal improvement in the statistical validity and reliability of the measures was not seen to be appropriate.

After purifying the measures, collected data from the retained items were ready to be transformed into an appropriate form for regression analysis using data reduction methods. These data reduction techniques will be discussed next.

### **5.5.3 Data reduction methods**

In this section, purified data were reduced into an appropriate form for the regression analysis. This can be done by either using surrogate variables or creating a smaller set of variables (Hair et al. 1998). A justification of the selection of the most appropriate data reduction technique is now given.

Surrogate variables could be developed by selecting the item with the highest factor loading on each factor and use it as a surrogate variable that is representative of that factor. However, this technique was considered inappropriate for this research since, for some constructs, such as **market (price) mavenism**, and **innovativeness**, factor loadings of the first alternative item were not substantially higher than that of the second one. Therefore, a selection of the surrogate variable for these constructs might not be

easily done. More importantly, this data reduction technique relies on single items that may not well represent each of the extracted factors. It also ignores the issue of measurement error possibly existing when using single items. This in turn could result in misleading analytical results (Hair et al. 1998).

Alternatively, purified data can be combined into a smaller set of variables developed from factor scores or summated scales (Hair et al. 1998). To create summated scales, all of the items loading highly on a factor need to be combined, and the average score of these items computed and used as a replacement variable. However, a disadvantage of summated scale is that this technique uses only the items with high loadings on the factor and excludes those having low loadings (Hair et al. 1998). As all remaining purified items were considered important and needing to be retained in the regression analysis, a summated scale approach was therefore considered inappropriate to be used for aggregating the purified data in this research.

Thus purified data were combined using factor scores, through principle components analysis. Factor scores use all items relevant to each of the extracted factors to compute composite measure for that factor. Thus, the items with higher loadings on an extracted factor will have a higher factor score (Hair et al. 1998).

Rather than using common factor analysis, principle components analysis was performed to compute factor scores because the goal of this analysis is to summarize the purified data, and not to detect the structure of the variables (Bentler & Kano 1990; Hair et al. 1998). This factor analysis technique enables the researcher to transform a number of correlated variables found in the previous factor analysis into a set of uncorrelated variables by taking into account total variances, which include common, specific and error variances. This data transformation in turn enables the researcher to generate the minimum number of factors needed to account for the maximum portion of the variance represented in the original set of variables (Hair et al. 1998).

Factor scores were computed for each of the purified items using principles component analysis and the results of this analysis are summarized in Table 5.27. Purified data were then aggregated based on these resulting factor scores. The aggregated data will be used as the input for the next section of the regression analysis.

**Table 5.27- Summary of factor scores using principle component analysis**

Constructs	Items	Factor loadings on the extracted factor	Constructs	Items	Factor loadings on the extracted factor
Price consciousness	3.1	0.700	Loyalty to other athletic footwear brands	3.16	0.598
	3.11	0.775		3.32 r	0.762
	3.19	0.725		3.42	0.763
	3.38	0.728			
Deal proneness	3.6	0.715	Variety seeking	3.4	0.708
	3.15	0.806		3.14	0.827
	3.23	0.715		3.24	0.674
	3.31	0.751		3.40	0.799
Need for cognition	3.5	0.739	Innovativeness	3.10	0.772
	3.21	0.805		3.25	0.770
	3.27	0.782		3.37	0.716
Market (price) mavenism	3.2	0.795	Motivation to conform to expectations of reference groups	3.3	0.638
	3.9	0.826		3.13	0.678
	3.18	0.762		3.26	0.786
	3.41	0.828		3.35	0.637
Quality consciousness	3.22	0.858	Attitudes of reference groups to seasonally discounted Reebok athletic footwear	3.17 r	0.702
	3.29	0.230		3.28 r	0.583
	3.34	0.860		3.33	0.717
				3.36	0.611
Value consciousness	3.8	0.702			
	3.12	0.521			
	3.30	0.745			
	3.39	0.757			

Extraction Method: Principle component analysis

Source: Analysis of survey data

## 5.6 Test of hypotheses and assumptions of regression models

Once the data have been purified and aggregated, the proposed hypotheses are able to be tested. This section begins with the discussion regarding key assumptions of the regression models that need to be tested (section 5.6.1). Then, the results of the tests of the proposed hypotheses and the tests of the assumptions of regression models will follow in section 5.6.2.

### 5.6.1 Key assumptions of the regression models

There are five key assumptions inherent in the regression models in this analysis and these include linearity, homoscedasticity, normality, multicollinearity, and independence of the error terms (Dielman 2001; Hair et al. 1998). However, the assumption regarding independence of the error terms was not tested in this thesis because this research has not used time series data (Dielman 2001) or sequencing variables (Hair et al. 1998).

The assumptions of regression models were tested since findings from this research using a number of variables could be biased when these assumptions were violated (Hair et al. 1998). In particular, *nonlinearity* exists when correlations between the independent and the dependent variables are not linear. This violation can result in an

underestimation of the actual strength of the relationship found between these variables (Hair et al. 1998).

The assumption of *homoscedasticity* is violated (*heteroscedasticity*) when the variance of the dependent variable being explained in the dependence relationship concentrates in only a limited range of the independent values. This violation not only causes the predictions to be more effective at some levels of the independent variable than at others, but also makes hypothesis tests either too conservative or too sensitive (Dielman 2001; Hair et al. 1998).

*Nonnormality* occurs when the shape of the data distribution for the variables varies considerably from the normal distribution. This violation may result in achieving invalid statistical results (Hair et al. 1998).

*Multicollinearity* becomes the issue when the independent variables highly correlate with each other. High degrees of multicollinearity can result in both regression coefficients being inaccurately estimated, and difficulties in separating the influence of the individual variables on the dependent variables (Dielman 2001; Hair et al. 1998).

After estimating the regression equations for each of the proposed hypotheses, the model assumptions previously discussed were assessed in this study (Dielman 2001). These assumptions can be examined by using graphical tools (such as scatter plots, or residual plots) and/or statistical analyses. As violations of assumptions can often be detected through the use of graphical techniques (in particular the residual plots) without the use of statistical tests (Dielman 2001), and as residual plots are better than scatter plots in detecting small variations, particularly in relation to linearity (Dielman 2001), it was therefore decided to use residual plots for testing linearity and homoscedasticity for this research. Standardized residuals were used in order to make residuals directly comparable (Hair et al. 1998). If no assumptions are violated, the residuals should be randomly distributed around their mean of zero (Dielman 2001; Hair et al. 1998) In addition, normality was tested using normal probability plots. Normality is achieved when the graphs illustrate no tremendous departure from the diagonal line (Hair et al. 1998).

In addition, tolerance values and values of variance inflation factor (VIF) were used to examine multicollinearity (Dielman 2001; Hair et al. 1998). Any variables with a tolerance value below 0.10 or with a value above 10.0 of VIF would have a correlation of more than 0.90 with other variables, indicative of the multicollinearity problem (Hair et al. 1998).

Standardized residual plots, normal probability plots, and calculations of tolerance values and VIF were performed for each of the proposed hypotheses to assess whether the data violated the assumptions of the regression models. The results of these tests will be reported along with the results of the hypothesis testing, which are now discussed.

### **5.6.2 Results of the tests of the proposed hypotheses**

All the hypotheses proposed in section 3.4.2 will be tested in this section. The regression equations were conducted over the full sample for each of the proposed hypotheses, including those proposing to test the influence of *demographic variables* on the *psychographic* and *normative influencing variables* (H1 to H10), those proposing to test the influence of the *psychographic* and *normative influencing variables* on the **purchase intentions** (H11A to H11K), and those proposing to test the influence of all of these independent variables on the **purchase intentions** (H12). The results of the regression equations are reported along with the results of the test of multicollinearity in Table 5.28, 5.36, and 5.39 respectively. Residual plots and normal probability plots of all hypotheses are displayed in Appendices 5.4 to 5.15. For hypotheses that have more than one independent variable, correlation analysis will be used to present an overall picture of the correlations between the independent variables. The discussion now turns to the results of the hypothesis testing commencing with those proposing to test the influence of *demographic* on *psychographic and normative influencing variables*.

**Table 5.28- Multiple regression analyses for hypotheses proposing the influence of *demographic variables* on *psychographic and normative influencing variables***

Hypotheses	Unstandardized coefficient (B)	Standardized coefficient (Beta)	t-Stat	Sig T	Violations of assumptions (Y=yes, N=no)			Tolerance	VIF
					Heteroscedasticity	Linearity	Normality		
<p><i>H1</i>  <i>Dependent variable:</i> Price consciousness  Adjusted R square 5.4%  F 10.911  Signif F 0.000</p> <p><i>Independent variable</i>  Income  Family size  Marital status</p>	-0.146 -0.000 -0.057	-0.236 -0.001 -0.029	-5.377 -0.017 -1.640	0.000 0.986 0.523	N N N	N N N	N N N	0.937 0.926 0.907	1.067 1.080 1.103
<p><i>H2</i>  <i>Dependent variable:</i> Deal proneness  Adjusted R square -0.2%  F 0.004  Signif F 0.948</p> <p><i>Independent variable</i>  Gender</p>	-0.006	-0.003	-0.065	0.948	N	N	N	1.000	1.000
<p><i>H3</i>  <i>Dependent variable:</i> need for cognition  Adjusted R square 0.0%  F 0.908  Signif F 0.341</p> <p><i>Independent variable</i>  Education</p>	-0.039	-0.041	-0.953	0.341	N	N	N	1.000	1.000
<p><i>H4</i>  <i>Dependent variable:</i> variety seeking  Adjusted R square 0.1%  F 1.445  Signif F 0.230</p> <p><i>Independent variable</i>  Education</p>	-0.049	-0.052	-1.202	0.230	N	N	N	1.000	1.000



**Table 5.28- continued**

Hypotheses	Unstandardized coefficient (B)	Standardized coefficient (Beta)	t-Stat	Sig T	Violations of assumptions (Y=yes, N=no)				
					Heteroscedasticity	Linearity	Normality	Tolerance	VIF
<p><i>H5</i>  <i>Dependent variable:</i> quality consciousness  Adjusted R square 0.1%  F 1.299  Signif F 0.255</p> <p><i>Independent variable</i>  Education</p>	0.047	0.049	1.140	0.255	N	N	N	N	N
<p><i>H6</i>  <i>Dependent variable:</i> market (price) mavenism  Adjusted R square 0.5%  F 3.894  Signif F 0.049</p> <p><i>Independent variable</i>  Age</p>	0.079	0.085	1.973	0.049	N	N	N	N	N
<p><i>H7</i>  <i>Dependent variable:</i> value consciousness  Adjusted R square 0.2%  F 1.423  Signif F 0.242</p> <p><i>Independent variable</i>  Age  Marital status</p>	-0.078 0.154	-0.083 0.076	-1.559 1.436	0.119 0.152	N	N	N	N 0.657 0.657	N 1.523 1.523
<p><i>H8</i>  <i>Dependent variable:</i> Loyalty to other athletic footwear brands  Adjusted R square 0.00%  F 0.900  Signif F 0.343</p> <p><i>Independent variable</i>  Age</p>	0.052	0.053	0.949	0.343	N	N	N	N	N

**Table 5.28- continued**

Hypotheses	Unstandardized coefficient (B)	Standardized coefficient (Beta)	t-Stat	Sig T	Violations of assumptions (Y=yes, N=no)				
					Heteroscedasticity	Linearity	Normality	Tolerance	VIF
<p><i>H9</i>  <i>Dependent variable:</i> innovativeness  Adjusted R square 1.00%  F 3.783  Signif F 0.023</p> <p><i>Independent variable</i>  Education  Age</p>					N	N	N	N	N
	-0.116 0.046	-0.123 0.050	-2.730 1.110	0.007 0.268				0.916 0.916	1.091 1.091
<p><i>H10</i>  <i>Dependent variable:</i> motivation to conform  Adjusted R square 0.70%  F 1.880  Signif F 0.133</p> <p><i>Independent variable</i>  Employment status (employed group)  Age  Managerial position</p>					N	N	N	N	N
	-0.320 -0.045 -0.046	-0.145 -0.040 -0.053	-2.182 -0.676 -0.726	0.030 0.500 0.468				0.628 0.798 0.527	1.592 1.253 1.897

Source: developed for this thesis and the analysis of survey data

**The influence of *demographic factors on psychographic or normative influencing factors***

**H1A: Income will negatively influence price consciousness,**

**B: Family size will positively influence price consciousness, and**

**C: There is a difference in price consciousness across marital status.**

Correlation analysis was performed for this hypothesis to explore the relationship between these three demographic variables and **price consciousness**, and the result is summarized in Table 5.29. It indicates that **income** has a negative relationship with **price consciousness** ( $r = -0.241, p < 0.01$ ). That is, consumers with higher income were less likely to be price conscious than those with lower income in this sample. **Marital status** was found to have a significant and negative relationship with **price consciousness** ( $r = -0.073, p < 0.05$ ). The relationship found between these two variables indicated that married respondents were less likely to be price conscious than unmarried ones, which was as expected. However, this relationship was very weak. Empirically, **marital status** was therefore not considered to be strongly related with **price consciousness**. In addition, **family size** was not found to be associated at all with **price consciousness**.

**Table 5.29- Correlation matrix (income, family size, and price consciousness)**

Variables	Price consciousness	Income	Family size	Marital Status 'Married'
Price consciousness	1.000			
Income	-0.241**	1.000		
Family size	-0.023	0.121**	1.000	
Marital Status 'Married'	-0.073*	0.189**	-0.216**	1.000

\*  $p < 0.05$ , \*\*  $p < 0.01$

Source: Analysis of the survey data

This correlation matrix also signals the significant relationships between **demographic variables**, which had not previously been indicated in the literature. **Income** was found to be positively correlated with **family size** ( $r = 0.121, p < 0.01$ ). **Income** was also shown to have a positive relationship with **marital status** ( $r = 0.189, p < 0.01$ ). This indicates that married respondents were likely to have a higher income than unmarried respondents. **Family size** was found to have a weak negative correlation with **marital status** ( $r = -0.216, p < 0.01$ ). This suggests that married consumers were likely to have a

lower family size than unmarried people in this sample. This may be because single people may live with their parents or their extended family and they may move out to live with their couple after getting married.

These intercorrelations were checked statistically to determine whether they violated the assumption of multicollinearity using tolerance values and values of variance inflation factor (VIF). As summarized in Table 5.28, the resulting tolerance value is not below 0.10 and the VIF value is not above 10.0. These results indicate no violation of this assumption.

The regression analysis was performed and it yielded results consistent with that indicated by the correlation analysis. That is, **family size** and **marital status** were not found to significantly influence **price consciousness**. On the other hand, **income** was found to have a significant but weak negative influence on **price consciousness** as expected (Beta = -0.236,  $p < 0.01$ ). However, it explained only 5.4 percent of the total variability in **price consciousness**.

After the test of this hypothesis, data were assessed for linearity, homoscedasticity, and normality. As illustrated in Appendix 5.4, the probability plots show no major departures from the diagonal and the residual plots show the plots are randomly distributed around their mean of zero. These tools indicate no violation of these three assumptions. Thus, this hypothesis was partly supported. That is, **income** has a weak negative impact on **price consciousness**.

## **H2: Female consumers are more likely than male consumers to be deal prone.**

From Table 5.28, the regression analysis indicates no significant difference in **deal proneness** between males and females. The data was checked to determine whether or not it violated assumptions of the regression models. The probability plots and residual plots presented in Appendix 5.5, and the values of tolerance and VIF from Table 5.28 do not indicate any serious violations. This hypothesis was thus rejected. **Gender** is not a key factor that influences **deal proneness**.

**H3: Education will positively influence need for cognition.**

**H4: Education will positively influence variety seeking.**

**H5: Education will positively influence quality consciousness.**

In contrast to the above propositions, **education** was not found to have a significant influence on **need for cognition**, **variety seeking**, or **quality consciousness**, based on the regression results, which are summarized in Table 5.28. The data was tested for assumption violations in relation to regression analysis and the probability plots and residual plots illustrated in Appendix 5.6, 5.7, and 5.8, and the values of tolerance and VIF from Table 5.28 do not indicate any serious violations of the assumptions. These hypotheses were therefore rejected. **Education** is not influential in explaining the variance in **need for cognition**, **variety seeking**, or **quality consciousness** in this sample.

**H6: Age will positively influence market (price) mavenism.**

The results of regression analysis from the Table 5.28 indicate a significant but weak influence of **age** on **market (price) mavenism** as expected (Beta = 0.085,  $p < 0.05$ ). In addition, it explained only 0.50 percent of the total variability in **market (price) mavenism**.

The data were then examined for whether they violated the assumptions of the regression models. The probability plots and residual plots presented in Appendix 5.9, and the values of tolerance and VIF from Table 5.28 do not indicate any serious violations. Statistically, this hypothesis was therefore accepted. **Age** has a weak positive influence on **market (price) mavenism** in this sample.

**H7A: Age will positively influence value consciousness, and**

**H7B: There is a difference in value consciousness across marital status.**

Correlation analysis was performed for this hypothesis, and is shown in Table 5.30. It indicates a moderately strong relationship between **marital status** and **age** ( $r = 0.586$ ,  $p < 0.01$ ). That is, married consumers were more likely to be older than

unmarried people in this sample. However, both **age** and **marital status** were not found to be significantly correlated with **value consciousness**.

**Table 5.30- Correlation matrix (age, marital status, and value consciousness)**

Variables	Value consciousness	Age	Marital status 'Married'
Value consciousness	1.000		
Age	-0.038	1.000	
Marital status 'Married'	0.028	0.586**	1.000

\* p<0.05, \*\* p< 0.01

Source: Analysis of the survey data

The correlation found between **age** and **marital** was statistically checked if it violated the assumption of multicollinearity using tolerance values and values of variance inflation factor (VIF). As summarized in Table 5.28, the resulting tolerance value is not below 0.10 and VIF value is not above 10.0. These indicate no violation of this assumption.

Turning to the results of the regression analysis summarized in Table 5.28, consistent with that indicated by the correlation analysis, **age** and **marital status** did not significantly have an impact on **value consciousness**. The data were then tested on the assumptions of linearity, homoscedasticity, and normality. The probability plots and residual plots shown in Appendix 5.10 do not indicate any serious violations. Thus, these hypotheses were rejected. That is, **age** and **marital status** do not influence **value consciousness**.

**H8: Age will negatively influence loyalty to other athletic footwear brands.**

For this hypothesis, **age** was tested to determine whether it could have a negative impact on the variable of **loyalty to other athletic footwear brands** (not Reebok). Only respondents who identified their age and identified other athletic footwear brands (not Reebok) as their most favorite brand in Q3.7 in the questionnaire, were included in the analysis. Those whose answers identified Reebok as their most favorite brand were excluded. As a result, responses from 324 samples were used for this hypothesis testing.

As summarized in Table 5.28, the results of the regression analysis indicate no significant effect of **age** on the variable of **loyalty to other athletic footwear brands**, which is in contrast to the proposed hypothesis. The data used were then assessed for the violation of the assumptions of regression models. The probability plots and residual plots presented in Appendix 5.11, and the values of tolerance and VIF from Table 5.28 do not indicate any serious violations. This hypothesis was therefore rejected. **Age** does not negatively influence **loyalty to other athletic footwear brands**.

**H9A: Education will positively influence innovativeness, and**

**H9B: Age will negatively influence innovativeness.**

Correlation analysis was performed for this hypothesis, and the results are shown in Table 5.31. As a result, there is no relationship between **age** and **innovativeness**. However, in contrast to the proposition, **education** was found to have a weak negative correlation with **innovativeness** ( $r = -0.108$ ,  $p < 0.01$ ). In addition, the correlation matrix indicates a moderately strong positive relationship between **age** and **education** ( $r = 0.289$ ,  $p < 0.01$ ). This means that older respondents were likely to have a higher degree of education than younger respondents. Tolerance values and values of variance inflation factor (VIF) were then calculated to check if the correlation of these two demographic variables violated the assumption of multicollinearity. As summarized in Table 5.28, the resulting tolerance value was not below 0.10 and VIF value was not above 10.0, indicating that this assumption has not been violated.

**Table 5.31- Correlation matrix (age, education, and innovativeness)**

Variables	Innovativeness	Age	Education
<b>Innovativeness</b>	1.000		
<b>Age</b>	0.014	1.000	
<b>Education</b>	-0.108**	0.289**	1.000

\*  $p < 0.05$ , \*\*  $p < 0.01$

Source: Analysis of the survey data

Regression analysis was performed to further examine the relationships of these three variables. The results summarized in Table 5.28 indicate that **education** is the only key demographic variable that has a significant but weak negative influence on **innovativeness**. That is, less educated respondents were more likely to demonstrate characteristics of innovativeness than more educated respondents

(Beta = -0.123,  $p < 0.01$ ). In contrast, **age** was not found to have a significant influence on **innovativeness**.

These results support the findings from the correlation analysis but are in contrast to the proposition where it was stated that education would have a positive influence on innovativeness and that age would have a negative influence. It is important to note, however, that **education** explained only 1.00 percent of the total variability in **innovativeness**.

The data were then assessed on the violations of assumptions of regression models. The probability plots and residual plots illustrated in Appendix 5.12 do not indicate any serious violations. This hypothesis was therefore partly accepted. That is, **education** is an influencing factor that explains some of the variance in **innovativeness**.

**H10A: There is a difference in level of motivation to conform to expectations of reference groups across employment status, and**

**H10B: Age will negatively influence ‘motivation to conform’, and**

**H10C: Managerial position in the organization will positively influence ‘motivation to conform’.**

For this hypothesis, data used for the analysis were the answers from Q4.4 (**employment status**), Q4.5 (**managerial position**), and the psychographic questions of ‘**motivation to conform**’ in the questionnaire. As previously discussed in section 5.3.1, the variable of **employment status** was transformed into a dummy variable and the responses from this question were categorized into three groups, namely: ‘unemployed’; ‘employed’ (including part time and full time employee); and ‘self-employed’ (without and without their own employees). However, when taking the variable of ‘**managerial position**’ into account, only the data from ‘employed’ and ‘self-employed’ groups were used for the analysis. As a result, responses from 361 samples were used for this hypothesis testing.

Correlation analysis was performed to explore the inter-relationships of these variables. The results of this analysis are shown in Table 5.32, indicating a number of inter-correlations between all of these variables. ‘**Managerial position**’ was found to be



positively associated with **age** ( $r = 0.442, p < 0.01$ ). That is, older consumers were more likely to have a higher managerial position than younger consumers in this sample.

‘**Managerial position**’ was also shown to have a strongly negative correlation with the ‘employed’ group of the variable of **employment status** ( $r = -0.606, p < 0.01$ ). This suggests that employed respondents (including those who worked for a company or organization as an either part time or full time employee) had a lower managerial position in their organization than self-employed respondents (including those who had their own businesses with or without their own employees).

**Table 5.32- Correlation matrix (managerial position, age, employment status, and ‘motivation to conform’)**

Variables	Motivation to conform	Managerial position	Age	Employment status ‘Employed’
Motivation to conform	1.000			
Managerial position	0.017	1.000		
Age	-0.034	0.442**	1.000	
Employment status ‘Employed’	-0.105*	-0.606**	-0.203**	1.000

\*  $p < 0.05$ , \*\*  $p < 0.01$

Source: Analysis of the survey data

In addition, **age** was found to have a negative relationship with the ‘employed’ group of the variable of **employment status** ( $r = -0.203, p < 0.01$ ). This indicates that respondents who were employed were younger than self-employed respondents.

In terms of the correlations between these three *demographic variables* (**employment status, managerial position, and age**) and ‘**motivation to conform**’, only **employment status** was seen to have a significant but weak negative relationship with ‘**motivation to conform**’ ( $r = -0.105, p < 0.05$ ). This supports the proposed hypothesis and suggests that employed respondents were less likely to be motivated to conform to expectations of their reference groups than those who were self-employed. This could occur because self employed respondents might be more likely to perceive themselves working at a higher management level than employed respondents as they were the owner of the company. Based on the findings of exploratory research, consumers who worked at a higher management level might be more concerned of their self image, and in turn be more likely to take expectations of reference groups into their considerations when buying products, than others who worked at a lower management level.

Tolerance values and values of variance inflation factor (VIF) were then calculated to examine whether the intercorrelations of these *demographic variables* violated the assumption of multicollinearity. As summarized in Table 5.28, the resulting tolerance value was not below 0.10 and VIF value was not above 10.0, suggesting that this assumption has not been violated.

Regression analysis was performed and the results are summarized in Table 5.28. They indicate that **employment status** is the only key *demographic characteristic* that could have a significant but weak influence on ‘**motivation to conform**’ (Beta = -0.145,  $p < 0.05$ ). In contrast, **managerial position** and **age** were not shown to have a significant effect on ‘**motivation to conform**’. These results support that from the correlation analysis.

The data were then assessed to determine if they violated the assumptions of normality, linearity, and homoscedasticity. Probability plots and residual plots were run and are illustrated in Appendix 5.13. They do not indicate any major violations of these assumptions. Thus, only hypothesis 10A was accepted and hypotheses 10B and 10C were rejected. That is, for this sample, there is a difference in the level of ‘**motivation to conform**’ between respondents who were employed and those who were self-employed. Specifically, employed respondents were less likely to be motivated to conform to expectations of reference groups than those who were self-employed. In addition, **age** and ‘**managerial position**’ do not have a significant impact on **motivation to conform to expectations of reference groups**.

In brief, all hypotheses stating the influence of *demographic variables* on the *psychographic* and *normative influencing variables* were tested in this section. Table 5.33 summarizes which hypothesis was accepted or rejected. It was found that only four out of sixteen sub-hypotheses were accepted (hypotheses 1A, 6, 9A, and 10A). In addition, *demographic variables* found to be significant in this analysis could explain variability in the proposed *psychographic* or *normative influencing variables* only slightly. Overall, this suggests that *demographic variables* were unlikely to have a strong influence on *psychographic* and *normative influencing variables* for this sample.

**Table 5.33-Summary of the results of hypothesis testing in relation to the effect of demographic on psychographic and normative influencing variables**

Hypothesis	Expected relationships	Accepted or Rejected
H1	A: Income will negatively influence price consciousness B: Family size will positively influence price consciousness C: There is a difference in price consciousness across marital status.	Accepted Rejected Rejected
H2	Female consumers are more likely than male to be deal prone.	Rejected
H3	Education will positively influence need for cognition.	Rejected
H4	Education will positively influence variety seeking.	Rejected
H5	Education will positively influence quality consciousness.	Rejected
H6	Age will positively influence market (price) mavenism.	Accepted
H7	A: Age will positively influence value consciousness B: There is a difference in value consciousness across marital status.	Rejected Rejected
H8	Age will negatively influence loyalty to other athletic footwear brands.	Rejected
H9	A: Education will positively influence innovativeness B: Age will negatively influence innovativeness.	Accepted Rejected
H10	A: There is a difference in the level of motivation to conform to the expectations of reference groups across employment status B: Age will negatively influence motivation to conform to the expectations of reference groups C: Managerial position will positively influence motivation to conform to expectations of reference groups.	Accepted Rejected Rejected

*Source: developed for this thesis and the analysis of survey data*

In respect to the correlations between antecedent variables, correlation analyses were performed to explore the degree of these correlations. The results have signaled a number of intercorrelations of antecedent *demographic variables*, which had not previously been indicated in the literature. These intercorrelations included the positive correlations between specific *demographic variables* (**income and family size, income and marital status, marital status and age, age and education, and managerial position and age**), and the negative relationships between other *demographic variables* (**family size and marital status, managerial position and employment status, and age and employment status**). These intercorrelations will be further explored in the next section of the hypothesis proposing to test the influence of all antecedent *demographic, psychographic and normative influencing variables* on the **purchase intention** variable. The discussion now turns to the results of the test of hypothesis proposing to

test the influence of all *psychographic* and *normative influencing variables* on **purchase intentions**.

**The influence of *psychographic* and *normative influencing variables* on the variable of purchase intentions**

All hypotheses proposing to test the effect of all 11 *psychographic* and *normative influencing variables* on **purchase intentions** were addressed in section 3.4.2, and are re-presented in Table 5.34.

**Table 5.34- Summary of hypotheses of the effect of *psychographic* and *normative influencing variables* on the purchase intentions**

Hypothesis	Expected relationships
H11	<p>A: Price consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>B: Deal proneness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>C: Need for cognition will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>D: Market (price) mavenism will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>E: Quality consciousness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>F: Value consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>G: Loyalty to other athletic footwear brands will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>H: Variety seeking will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>I: Innovativeness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear,</p> <p>J: Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.</p> <p>K: Motivation to conform to the expectations of reference groups will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear.</p>

Source: Developed for this thesis from Table 3.9

Correlation analysis was performed first to explore the relationship between all of the investigated psychographic, normative influencing variables and the single dependent variable (**purchase intentions**). Shown in Table 5.35 are the results of the correlation analysis indicating a number of intercorrelations between all of these variables. Most of

the relationships found in this analysis between the *psychographic* and *normative influencing variables* and **purchase intentions** are as proposed in the relevant hypotheses, except that there appears to be a positive (instead of a negative as proposed in hypothesis 11C) relationship between **need for cognition** and **purchase intentions** ( $r = 0.203, p < 0.01$ ). In contrast to hypothesis 11K, '**motivation to conform**' was not seen to be significantly related with **purchase intentions**.

From all of the *psychographic* and *normative influencing variables*, **deal proneness** was found to have the strongest correlation with **purchase intentions** ( $r = 0.693, p < 0.01$ ), and this is followed by **price consciousness** and **purchase intention** ( $r = 0.540, p < 0.01$ ), '**attitudes of reference groups**' and **purchase intentions** ( $r = 0.495, p < 0.01$ ), and **value consciousness** and **purchase intentions** ( $r = 0.429, p < 0.01$ ).

In addition, this correlation analysis indicates a number of significant interrelationships between *psychographic* and *normative influencing variables*, which have not been previously indicated by studies reviewed in the literature and by the exploratory research. For example, **market (price) mavenism** was shown to be correlated with **innovativeness** ( $0.477, p < 0.01$ ). '**Attitudes of reference groups**' and **price consciousness** were found to have a positive correlations with **deal proneness** ( $r = 0.472, p < 0.01$ , and  $r = 0.468, p < 0.01$ , respectively). The interrelationships of these *psychographic* and *normative influencing variables* will be further detailed in the next section, which discusses the results of the tests of the influence of all antecedent *demographic, psychographic* and *normative influencing variables* on the **purchase intention** variable.

Tolerance values and values of variance inflation factor (VIF) were calculated to determine whether the intercorrelations of these *psychographic* and *normative influencing variables* violated the assumption of multicollinearity. As summarized in Table 5.36, the resulting tolerance value was not below 0.10 and the VIF value was not above 10.0, suggesting that this assumption has not been violated.

**Table 5.35- Correlation matrix (all 11 psychographic and normative influencing variables, and purchase intentions)**

Variables	Purchase intentions	Price consciousness	Deal proneness	Need for cognition	Market (price) mavenism	Quality consciousness	Value consciousness	Loyalty to other brands	Variety seeking	Innovativeness	Attitudes of reference groups	Motivation to conform
Purchase intentions	1.000											
Price consciousness	0.540**	1.000										
Deal proneness	0.693**	0.468**	1.000									
Need for cognition	0.203**	0.165**	0.066	1.000								
Market (price) mavenism	0.166**	0.162**	0.202**	0.178**	1.000							
Quality consciousness	-0.153**	-0.051	0.004	-0.034	0.106*	1.000						
Value consciousness	0.429**	0.195**	0.207**	0.422**	0.186**	0.020	1.000					
Loyalty to other brands	-0.108*	-0.041	-0.096*	0.152**	0.104*	0.172**	0.085	1.000				
Variety seeking	0.100*	0.115*	0.124*	0.066	0.213**	0.044	0.080	0.028	1.000			
Innovativeness	-0.122*	-0.016	-0.060	0.201**	0.477**	0.187**	0.142**	0.239**	0.249**	1.000		
Attitudes of reference groups	0.495**	0.133**	0.472**	0.193**	0.101*	-0.006	0.279**	-0.103*	0.082	-0.047	1.000	
Motivation to conform	0.072	0.147**	0.080	0.086	0.203**	0.093*	0.038	0.033	0.125*	0.268**	-0.043	1.000

\* p<0.05, \*\* p <0.01

Source: Analysis of survey data

After the correlation analysis, the regression analysis was performed to test the above hypotheses. The results summarized in table 5.36, indicate that 65.80% of the variance in **purchase intentions** could be explained by these *psychographic* and *normative influencing variables*, however they were not all significant in this explanation. From all of the investigated *psychographic* and *normative influencing variables*, only six *psychographic* and *normative influencing variables* were seen to significantly influence **purchase intentions**. They included **deal proneness; value consciousness; price consciousness; ‘attitudes of reference groups’; quality consciousness; and innovativeness**.

**Deal proneness** has been shown to be the most important factor that positively influences **purchase intentions** (Beta = 0.418,  $p < 0.01$ ), followed by **value consciousness** (Beta = 0.254,  $p < 0.01$ ) and **price consciousness** (Beta = 0.248,  $p < 0.01$ ) respectively. The direction of the correlation between these three variables and **purchase intentions** is as proposed in the relevant hypotheses, that is positive influence.

The influences of the other *psychographic variables* on **purchase intention** found in this analysis are also as predicted. These include the positive effect of ‘**attitudes of reference groups**’ on **purchase intentions** (Beta = 0.182,  $p < 0.01$ ) and the negative impact of **quality consciousness**, and **innovativeness** on **purchase intentions** (Beta = -0.128,  $p < 0.01$ ; and Beta = -0.124,  $p < 0.01$ , respectively). However, **need for cognition, market (price) mavenism, loyalty to other athletic footwear brands, variety seeking**, and ‘**motivation to conform**’ were not found to have a significant influence on **purchase intentions**, and these do not support the relevant propositions.

Next, data were then tested to determine whether they violated the assumptions of the regression models. The probability plots and residual plots, illustrated in Appendix 5.14, do not indicate any major violations. It was therefore concluded that hypothesis 11 was partly accepted. Particularly, hypothesis 11A, B, E, F, I, and J were accepted whilst hypothesis 11C, D, G, H, and K were rejected.

**Table 5.36- Multiple regression analyses for hypotheses proposing the influence of *psychographic* and *normative influencing variables* on purchase intentions**

Hypotheses					Violations of assumptions (Y=yes, N=no)				
	Unstandardized coefficient (B)	Standardized coefficient (Beta)	t-Stat	Sig T	Heteroscedasticity	Linearity	Normality	Tolerance	VIF
<i>H11</i> <i>Dependent variable:</i> purchase intentions Adjusted R square 65.80% F 55.961 Signif F 0.000					N	N	N	N	N
<i>Independent variable</i>									
A: Price consciousness	0.224	0.248	6.406	0.000				0.723	1.382
B: Deal proneness	0.371	0.418	9.648	0.000				0.579	1.726
C: Need for cognition	0.004	0.004	0.113	0.910				0.757	1.320
D: Market (price) mavenism	0.038	0.040	1.013	0.312				0.703	1.422
E: Quality consciousness	-0.124	-0.128	-3.741	0.000				0.932	1.073
F: Value consciousness	0.221	0.254	6.680	0.000				0.756	1.323
G: Loyalty to other athletic footwear brands	-0.013	-0.015	-0.433	0.665				0.893	1.120
H: Variety seeking	0.007	0.008	0.230	0.818				0.906	1.103
I: Innovativeness	-0.113	-0.124	-3.001	0.003				0.640	1.563
J: Attitudes of reference groups	0.164	0.182	4.613	0.000				0.699	1.430
K: Motivation to conform	0.031	0.036	1.023	0.307				0.889	1.124

Source: developed for this thesis and the analysis of survey data



In brief, all hypotheses stating the influence of *psychographic* and *normative influencing variables* on the variable of **purchase intentions** were tested in this section. Table 5.37 summarizes which hypothesis was accepted or rejected.

**Table 5.37- Summary of the results of hypothesis testing in relation to the effect of *psychographic* and *normative influencing variables* on purchase intentions**

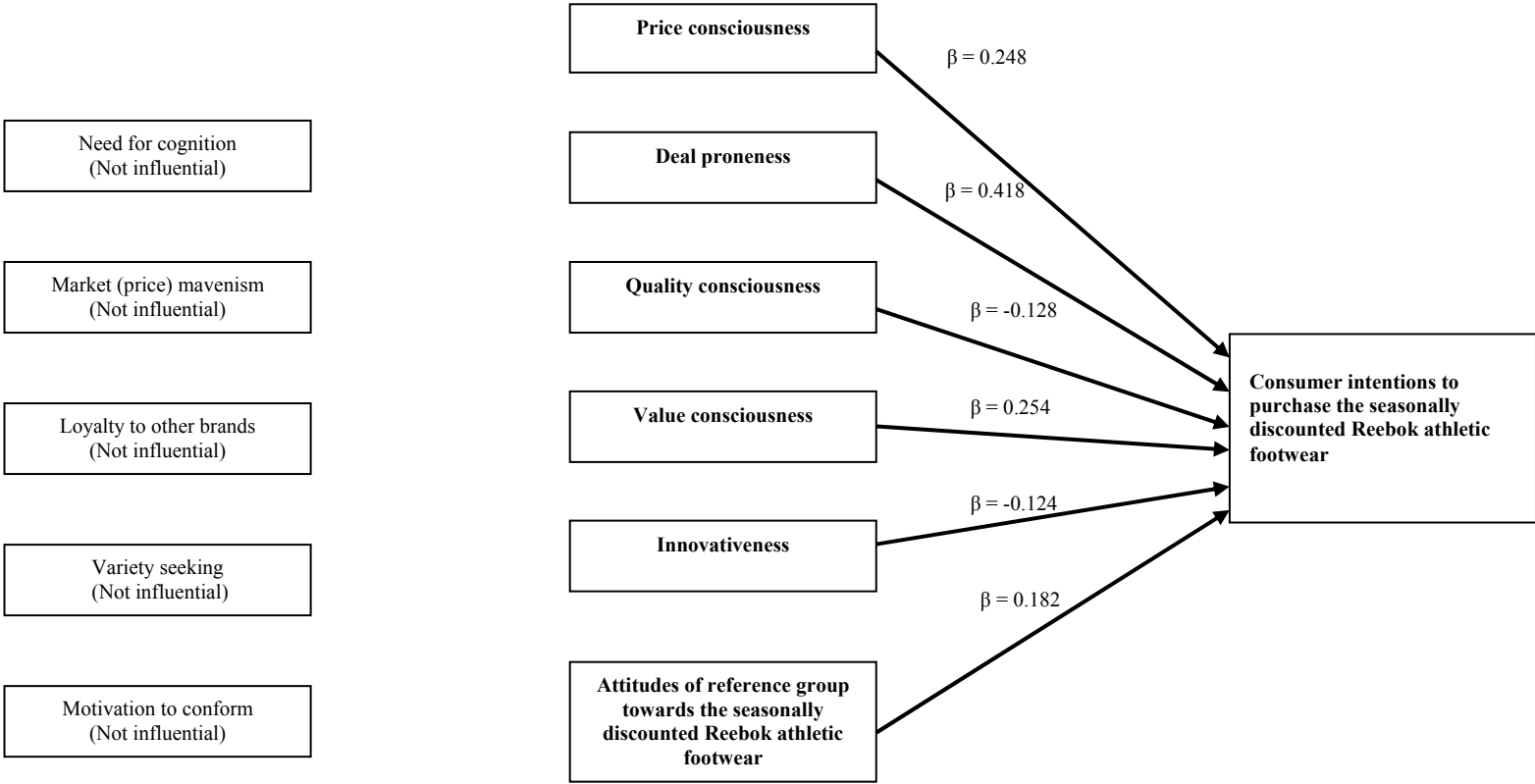
Hypothesis	Expected relationships	Accepted or Rejected
H11A	Price consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Accepted
H11B	Deal proneness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Accepted
H11C	Need for cognition will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Rejected
H11D	Market (price) mavenism will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Rejected
H11E	Quality consciousness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Accepted
H11F	Value consciousness will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Accepted
H11G	Loyalty to other athletic footwear brands will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Rejected
H11H	Variety seeking will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Rejected
H11I	Innovativeness will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Accepted
H11J	Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear will positively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Accepted
H11K	Motivation to conform to the expectations of reference groups will negatively influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear	Rejected

Source: Developed for this thesis from Table 3.9

In addition, correlation analyses were performed and the results signaled a number of intercorrelations between *psychographic* and *normative influencing variables*. These intercorrelations will be explored in greater detail in the next section.

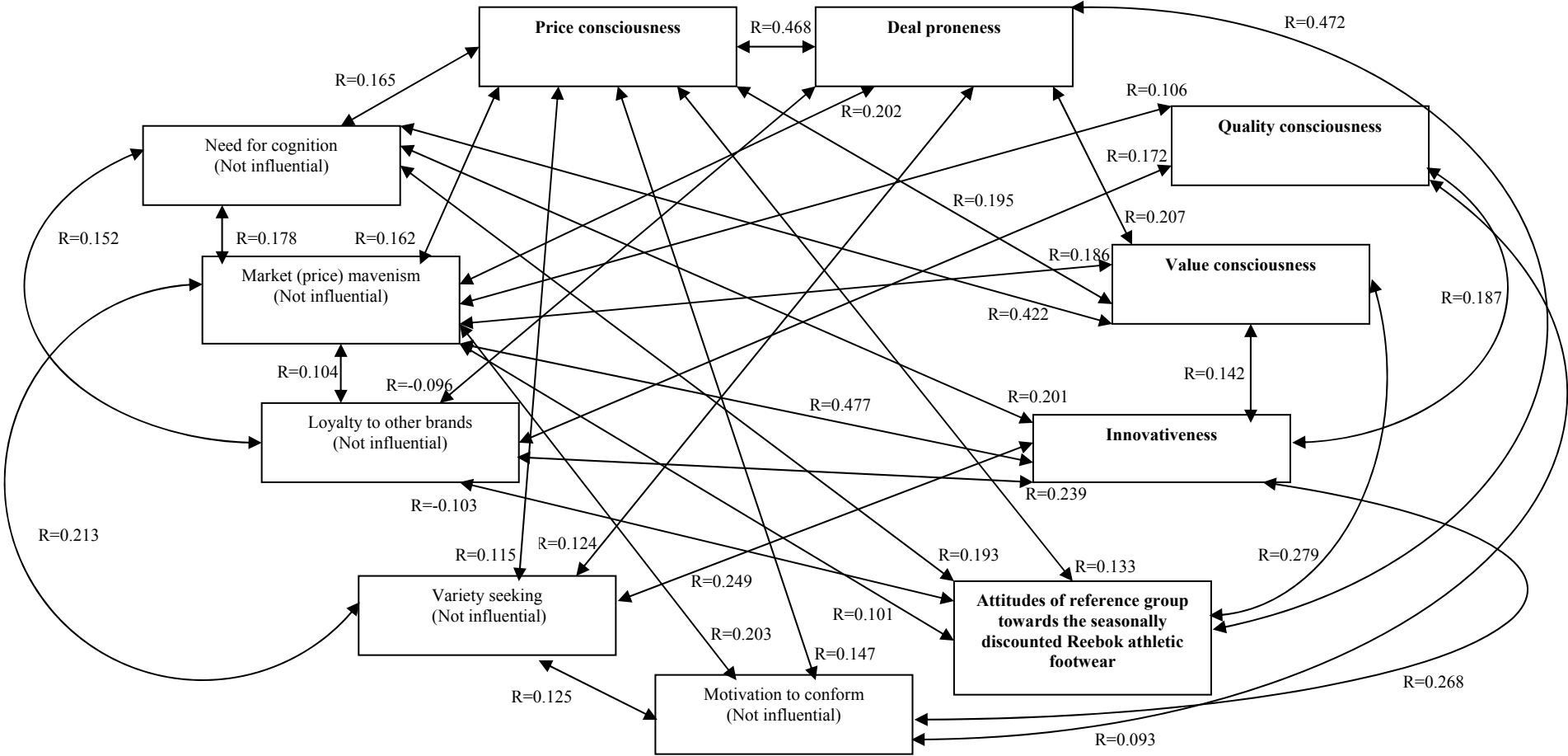
Based on these findings, the model depicting the influence of *psychographic* and *normative influencing variables* on **purchase intentions** was developed and is illustrated in Figure 5.6. This model shows the significant *psychographic* and *normative influencing independent variables* and their relationship with the dependent variable of **purchase intentions**. Beta weights are given to indicate the degree of the association between these variables. In addition, significant correlations between the *psychographic* and *normative influencing variables* are illustrated in Figure 5.7 in order to show the degree of intercorrelations of these antecedent variables.

Figure 5.6- Model depicting the influence of *psychographic* and *normative influencing factors* on purchase intentions



Source: Developed for this thesis

**Figure 5.7- Intercorrelations of *psychographic* and *normative influencing variables***



Source: Developed for this thesis

**The influence of all antecedent *demographic, psychographic, and normative influencing variables* on the variable of purchase intentions**

As reviewed in chapter 2, a number of empirical studies have attempted to investigate the impact of *demographic, psychographic* and *normative influencing factors* on consumer responses to products promoted through sales promotions. However, a complete picture depicting the impact of these factors on consumer responses to products promoted through sales promotions was unlikely to be well developed due to the fact that previous studies had focused on a different sets of these factors, and only a few of these studies (for instance Ailawadi et al. 2001; Mittal 1994) were conducted including all possible influential consumer characteristics into their investigations.

This study aimed to fill this gap by including all possible influential consumer characteristics identified by previous studies, and assessing the impact of these factors on consumers' intention to purchase the seasonally discounted Reebok athletic footwear. Therefore, to be tested simultaneously, the impact of all possible eight *demographic variables* (income, family size, marital status, gender, education, age, employment status, and managerial position), and eleven *psychographic* and *normative influencing variables* (price consciousness, deal proneness, need for cognition, market (price) mavenism, quality consciousness, value consciousness, loyalty to other athletic footwear brands, variety seeking, innovativeness, 'attitudes of reference groups', and 'motivation to conform') will be tested for their relationship with the dependant variable of **purchase intentions**. The hypothesis statement is proposed as follows:

**H12: There will be no influence of all eight *demographic variables*, and eleven *psychographic* and *normative influencing variables* on the variable of purchase intentions.**

Apart from the issue of the number of antecedent variables to be included in the analysis, correlation analyses in the previous sections so far have shown a number of interrelationships between antecedent consumer characteristics (particularly, the interrelationships between variables in the *demographic variable* group, and the interrelationships between variables in the *psychographic* and *normative influencing variable* group). These intercorrelations possibly have an impact on how these

antecedent variables influence **purchase intentions** by diminishing any single antecedent variables' predictive power by the extent to which it is correlated with the other antecedent variables (Hair et al. 1998). However, these intercorrelations have not been explored by the literature.

For this research, prior to testing the above hypothesis, it was decided to run a full correlation analysis by incorporating into the examination all of the investigated antecedent and dependent variables in order to get an overall picture of the relationships of all of these variables. By including both the variables of **managerial position** (Q 4.4) and **loyalty to other athletic footwear brands** (Q3.7) into the analysis, answers identifying respondents as unemployed or loyal consumers to Reebok athletic footwear were excluded. As a result, responses from only 219 samples were used for this correlation analysis and the hypothesis testing. The correlation matrix is illustrated in Table 5.38.

The results have shown a number of intercorrelations between antecedent consumer characteristics. For example, the significant relationships between variables in the *psychographic* and *normative influencing variable* group include those between **innovativeness** and **market (price) mavenism** ( $r = 0.481, p < 0.01$ ), **'attitudes of reference groups'** and **deal proneness** ( $r = 0.480, p < 0.01$ ), **value consciousness** and **need for cognition** ( $r = 0.441, p < 0.01$ ), and **price consciousness** and **deal proneness** ( $r = 0.418, p < 0.01$ ).

The significant associations between variables in the *demographic variable* group include, for instance, those between **managerial position** and 'employed' group of **employment status** ( $r = -0.589, p < 0.01$ ), 'married' group of **marital status** and **age** ( $r = 0.510, p < 0.01$ ), and **managerial position** and **income** ( $r = 0.499, p < 0.01$ ).

In contrast, the significant relationships between *demographic* and *psychographic* and *normative influencing variables* were found to be marginal. None of the correlation found between these two variable groups is greater than 0.40. This supports the results of the hypothesis testing in the previous section indicating a weak correlation between the *demographic* and *psychographic* and *normative influencing variables*.

**Table 5.38- Correlation matrix (including all demographics, psychographics, normative influencing variables and purchase intentions)**

Variables	Price consciousness	Value consciousness	Quality consciousness	Innovativeness	Market (price) mavenism	Loyalty to other brands	Variety seeking	Need for cognition	Deal proneness	Motivation to conform	Attitudes of reference groups
Price consciousness	1.000	0.154*	-0.085	-0.008	0.178**	-0.018	0.151*	0.221**	0.418**	0.165**	0.115*
Value consciousness		1.000	0.003	0.164**	0.236**	0.118*	0.124*	0.441**	0.168**	0.016	0.281**
Quality consciousness			1.000	0.261**	0.124*	0.161**	0.037	-0.028	0.008	0.128*	0.001
Innovativeness				1.000	0.481**	0.182**	0.290**	0.237**	-0.056	0.209**	0.019
Market (price) mavenism					1.000	0.097	0.230**	0.243**	0.250**	0.134*	0.156**
Loyalty to other brands						1.000	0.051	0.112*	-0.108	-0.029	-0.078
Variety seeking							1.000	0.137*	0.129*	0.161**	0.121*
Need for cognition								1.000	0.063	0.090	0.186**
Deal proneness									1.000	0.072	0.480**
Motivation to conform										1.000	-0.045
Attitudes of reference groups											1.000

\* p<0.05, \*\* p <0.01

Source: Analysis of survey data

**Table 5.38- continued**

<b>Variables</b>	<b>Gender 'Male'</b>	<b>Age</b>	<b>Education</b>	<b>Employment 'Employed '</b>	<b>Managerial position</b>	<b>Marital status 'Married'</b>	<b>Family size</b>	<b>Income</b>	<b>Purchase intentions</b>
<b>Price consciousness</b>	-0.073	-0.122*	-0.091	0.116*	-0.239**	-0.041	0.039	-0.265**	0.510**
<b>Value consciousness</b>	-0.050	-0.035	-0.026	-0.065	-0.099	-0.047	0.156*	-0.069	0.446**
<b>Quality consciousness</b>	0.174**	0.126*	0.061	0.019	0.078	0.078	-0.121*	0.159**	-0.136*
<b>Innovativeness</b>	0.046	0.103	-0.157**	-0.092	0.087	0.090	0.080	-0.040	-0.083
<b>Market (price) mavenism</b>	-0.077	0.048	-0.145*	-0.026	-0.035	0.036	-0.033	-0.096	0.209**
<b>Loyalty to other brands</b>	0.044	0.069	-0.117*	-0.094	0.038	-0.122*	0.047	0.059	-0.066
<b>Variety seeking</b>	-0.135*	-0.097	-0.127*	0.019	-0.091	-0.058	-0.014	-0.203**	0.160**
<b>Need for cognition</b>	-0.061	-0.137**	-0.067	0.055	-0.239**	-0.104	0.038	-0.221**	0.223**
<b>Deal proneness</b>	-0.145*	-0.157**	0.130*	0.128*	-0.146*	-0.101	-0.002	-0.053	0.665**
<b>Motivation to conform</b>	-0.047	-0.082	-0.114*	-0.108	-0.032	0.023	-0.053	0.010	0.033
<b>Attitudes of reference groups</b>	-0.217**	-0.113*	-0.036	0.124*	-0.183**	-0.099	0.117*	-0.103	0.465**

\* p<0.05, \*\* p <0.01

Source: Analysis of survey data

**Table 5.38- continued**

<b>Variables</b>	<b>Gender 'Male'</b>	<b>Age</b>	<b>Education</b>	<b>Employment 'Employed '</b>	<b>Managerial position</b>	<b>Marital status 'Married'</b>	<b>Family size</b>	<b>Income</b>	<b>Purchase intentions</b>
<b>Gender 'Male'</b>	1.000	0.225**	0.050	-0.100	0.228**	0.189**	-0.072	0.114*	-0.168**
<b>Age</b>		1.000	0.039	-0.158**	0.435**	0.510**	-0.040	0.234**	-0.158**
<b>Education</b>			1.000	0.106	0.152*	0.059	-0.133*	0.363**	0.078
<b>Employment 'Employed '</b>				1.000	-0.589**	-0.198**	-0.017	-0.290**	0.123*
<b>Managerial position</b>					1.000	0.396**	-0.152*	0.499**	-0.231**
<b>Marital status 'Married'</b>						1.000	-0.227**	0.168**	-0.090
<b>Family size</b>							1.000	0.123*	0.053
<b>Income</b>								1.000	-0.142*
<b>Purchase intentions</b>									1.000

\* p<0.05, \*\* p <0.01

Source: Analysis of survey data



In terms of the correlations between antecedent consumer characteristics and the variable of **purchase intentions**, *demographic variables* were found to have a weak association with **purchase intentions** in this sample. For example, respondents with a higher '**managerial positions**' were less likely to intend to purchase the seasonally discounted Reebok athletic footwear than those with a lower managerial positions ( $r = -0.231, p < 0.01$ ). In relation to **gender**, male consumers were less likely than female consumers to purchase the seasonally discounted Reebok athletic footwear ( $r = -0.168, p < 0.01$ ). In respect to **age**, older consumers were less likely to purchase the seasonally discounted Reebok athletic footwear than were younger consumers ( $r = -0.158, p < 0.01$ ).

On the other hand, *psychographic* and *normative influencing variables* appear to have a stronger relationship with **purchase intentions** than did the *demographic variables*. For example, **deal proneness** was seen to have the highest positive association with **purchase intention** ( $r = 0.665, p < 0.01$ ). This was followed by the positive relationships between **price consciousness** and **purchase intentions** ( $r = 0.510, p < 0.01$ ), '**attitudes of reference groups**' and **purchase intentions** ( $r = 0.465, p < 0.01$ ), and **value consciousness** and **purchase intentions** ( $r = 0.446, p < 0.01$ ) respectively.

Overall, there appears to be a number of moderately high correlations between antecedent consumer characteristics. To handle this intercorrelation issue, it was decided to test the above hypothesis by using the stepwise regression approach. This regression approach was considered more appropriate for this research than the forward addition or the backward elimination approach since stepwise regressions help the researcher select the smallest set of antecedent variables that maximizes the prediction of **purchase intentions**, based on antecedent variables' incremental explanatory power that can add to the regression model (Hair et al. 1998). As a result, the effects of other antecedent variables could be removed from the relationship between a single antecedent variable to be included in the model with the dependent variable (Hair et al. 1998).

In addition, the stepwise models enable the researcher to retest the coefficients of the variables already in the regression model after entering a new antecedent variable in the model, and then to delete these variables if they do not make a significant contribution to

the model. This analysis can not be performed when using either the forward addition or the backward elimination approach (Dielman 2001, Hair et al. 1998).

To perform the stepwise regression analysis, antecedent variables were entered into the model one by one and the order of entry of antecedent variables was arranged based on the following procedure:

1. Selecting and inputting into the model the first antecedent variable with the highest absolute value of correlation and the highest absolute value of partial correlation with the dependent variable (Hair et al. 1998);
2. Finding and adding to the model the next independent variable, which has the highest absolute value of partial correlation (Hair et al. 1998), and the highest absolute value of 'Beta In' with a significant  $t$  value ( $p$  value) not exceeding the entry criterion (Field 2000; Norusis 2000);
3. Examine the observed significance  $t$  value ( $p$  value) of the Beta value of variables already in the model and delete these variables from the model if the  $p$  value exceeds the removal criterion; and
4. Continue this procedure and variable selections end when no additional antecedent variables meet entry and removal criteria.

For this research, the observed significance  $t$  value ( $p$  value) of 0.05 and 0.10 was set as the entry and the removal criterion, respectively. Stepwise regressions were performed and the results are summarized in Table 5.39, and they are now addressed.

#### **Stepwise estimation 1: selecting the first variable (deal proneness)**

The analysis commenced with selecting and inputting the first antecedent variable into the model. The correlation matrix from Table 5.38 indicates **deal proneness** as the variable that had the highest correlation with **purchase intentions** ( $r = 0.665$ ,  $p < 0.01$ ), and as shown in the first step in Table 5.39, this antecedent variable was also found to have the highest value of partial correlation coefficient with **purchase intentions** ( $r = 0.452$ ). **Deal proneness** was therefore inputted first into the regression model. The regression analysis was performed and the results summarized in Table 5.39, indicate that **deal proneness** had a positive influence on **purchase intentions** (Beta = 0.665,  $p < 0.01$ ), and it explained 43.90% of the variance in **purchase intentions**.

### **Stepwise estimation 2: entering the second variable (value consciousness)**

In step 2, the second antecedent variable was selected and added to the regression model. Based on the results shown in Table 5.39, **value consciousness** was found to have the highest significant value of standardized coefficient with the p value not exceeding the entry criterion (Beta In = 0.344,  $p < 0.01$ ). **Value consciousness** was also seen to have the highest value of partial correlation ( $r = 0.454$ ). With these justifications, this variable was deemed appropriate to be entered into the model as the second key antecedent variable.

The regression analysis was performed, and as a result, **value consciousness** had a significant positive influence on **purchase intentions** (Beta = 0.344,  $p < 0.01$ ). An additional 11.40% of the variance in **purchase intentions** was contributed by **value consciousness**, yielding a total of 55.30 percent of the variation in **purchase intentions** that could be explained by the regression model with both **deal proneness** and **value consciousness**.

Next, the variable already in the model (**deal proneness**) was determined if it should be in the model after inputting **value consciousness** into the model. The value of standardized coefficient for **deal proneness** was examined, and as shown in Table 5.39, it was found to be significant with the p value below the removal criterion (Beta = 0.607,  $p < 0.01$ ). These indicate that **deal proneness** still made a significant contribution to the regression model. Thus, both **deal proneness** and **value consciousness** remained in the stepwise estimation procedure.

### **Stepwise estimation 3: adding the third variable (price consciousness)**

In the third step of this regression analysis, all 17 remaining antecedent variables were assessed for entry. As illustrated in Table 5.39, **price consciousness** was shown to have the highest significant value of standardized coefficient with the p value not exceeding the entry criterion (Beta In = 0.248,  $p < 0.01$ ), and it also had the highest value of partial correlation ( $r = 0.337$ ). This variable was therefore added to the model as the third key antecedent variable.

The regression analysis was performed, and **price consciousness** was found to have a significant positive influence on **purchase intentions** (Beta = 0.248,  $p < 0.01$ ). An

additional 4.90% of the variance in **purchase intentions** was explained by **price consciousness**, resulting in a total of 60.20 percent of the variation in **purchase intentions** that could be explained by three *psychographic variables* inputted into the model, which include **deal proneness**, **value consciousness**, and **price consciousness**.

Next, variables already in the model (**deal proneness** and **value consciousness**) were determined for removal after inputting **price consciousness** into the model. The value of standardized coefficient for **deal proneness** and **value consciousness** were assessed, and as summarized in Table 5.39, it was found to be significant with the p value not higher than the removal criterion (Beta = 0.507,  $p < 0.01$  for **deal proneness**, and Beta = 0.323,  $p < 0.01$  for **value consciousness**). These indicate that both **deal proneness** and **value consciousness** still made a significant contribution to the regression model. **Deal proneness**, **value consciousness**, and **price consciousness** were therefore considered appropriate to be included in the next step of stepwise regression analysis.

#### **Stepwise estimation 4: inputting the fourth variable ('attitudes of reference groups')**

The next step is to select the fourth antecedent variable for entering the regression model. Based on the values of standardized coefficient and partial correlation for the variables not in the model, shown in the fourth step in Table 5.39, '**attitudes of reference groups**' was seen to have both the highest significant value of standardized coefficient with the p value not exceeding the entry criterion (Beta In = 0.143,  $p < 0.01$ ) and the highest value of partial correlation ( $r = 0.193$ ). This variable was inputted into the model as the fourth key antecedent variable.

With '**attitudes of reference groups**' entered into the regression model, the results shown in Table 5.39 indicates '**attitudes of reference groups**' as an influential variable that could have a modest positive impact on **purchase intentions** (Beta = 0.143,  $p < 0.01$ ). An additional 1.30% of the variance in **purchase intentions** was explained by '**attitudes of reference groups**', resulting in a total of 61.50 percent of the variation in **purchase intentions** that could be explained by four *psychographic variables* inputted into the model and these variables include **deal proneness**, **value consciousness**, **price consciousness**, and '**attitudes of reference groups**'.

Next, examinations of the values of standardized coefficient (Beta values) for the three variables already in the model (**deal proneness**, **value consciousness**, and **price consciousness**) were performed. As summarized in Table 5.39, Beta values for these variables appeared to be significant with the p value below the removal criterion (Beta = 0.436,  $p < 0.01$  for **deal proneness**, and Beta = 0.292,  $p < 0.01$  for **value consciousness**, and Beta = 0.266,  $p < 0.01$  for **price consciousness**). These indicate that all of these three antecedent variables still made a significant contribution to the regression model. Thus, **deal proneness**, **value consciousness**, **price consciousness**, and **'attitudes of reference groups'** were included in the next step of stepwise regression estimation.

#### **Stepwise estimation 5: entering the fifth variable (quality consciousness)**

The next step is to find and add the fifth antecedent variable into the regression model. Based on the values of standardized coefficient and partial correlations for the variables not in the model, shown in step 5 in Table 5.39, **quality consciousness** was shown to have both the highest significant value of standardized coefficient with the p value not exceeding the entry criterion (Beta In = -0.119,  $p < 0.01$ ) and the highest value of partial correlation ( $r = -0.193$ ). This variable was therefore entered into the model at this stage.

With **quality consciousness** entered into the regression model, the results shown in Table 5.39 indicate a weak negative influence of **quality consciousness** on **purchase intentions** (Beta = -0.119,  $p < 0.01$ ). In addition, an additional 1.30% of the variance in **purchase intentions** was explained by **quality consciousness**, yielding a total of 62.80 percent of the variation in **purchase intentions** that could be explained by all five *psychographic variables* added into the model (**deal proneness**, **value consciousness**, **price consciousness**, **'attitudes of reference groups'**, and **quality consciousness**).

Next, values of standardized coefficient (Beta values) for the four variables already in the model (**deal proneness**, **value consciousness**, **price consciousness**, and **'attitudes of reference groups'**) were examined to determine the appropriateness of the inclusion of these variables in the next analysis of regressions. As summarized in Table 5.39, Beta values for these variables were found to be significant with the p value below the removal criterion (Beta = 0.443,  $p < 0.01$  for **deal proneness**, and Beta = 0.294,  $p < 0.01$  for **value consciousness**, Beta = 0.253,  $p < 0.01$  for **price consciousness**, and

Beta = 0.141,  $p < 0.01$  for '**attitudes of reference groups**'). These results support the inclusion of all of these five antecedent variables into the regression model. Thus, **deal proneness, value consciousness, price consciousness, 'attitudes of reference groups', and quality consciousness** were kept for the next step of stepwise regression estimation.

#### **Stepwise estimation 6: entering the sixth variable (none)**

In step 6, the analysis was conducted with an attempt to find the sixth antecedent variable to be entered into the regression model. The results are shown in step 6 in Table 5.39. Based on the values of standardized coefficient and partial correlations for all the *demographic, psychographic* and *normative influencing variables* not in the regression model, none of these variables were shown to have a significant value of standardized coefficient with the  $p$  value not exceeding the entry criterion. The partial correlation value for **innovativeness** ( $r = -0.133$ ) was found to be highest, however, this value was considered marginal. As a result, no additional value will be gained by adding all of these remaining variables to the regression model. Thus, stepwise regression estimations were completed with the inclusion of only five key significant antecedent variables. These variables were **deal proneness; value consciousness; price consciousness; 'attitudes of reference groups'; and quality consciousness** and they explained 62.8 percent of the variance in **purchase intentions**.

In terms of the relative importance of the antecedent variables, **deal proneness** was found to be the most important antecedent variable that had the strongest positive influence on **purchase intentions** and it was followed by **value consciousness; price consciousness; and 'attitudes of reference groups'** respectively. In addition, **quality consciousness** was found to be the least influential variable with a negative impact on **purchase intentions**. On the other hand, **none of the demographic variables** were shown to have a significant effect on **consumer intentions to purchase the seasonally discounted Reebok athletic footwear** in this sample.

After the regression estimation procedure, this set of data was statistically checked to see if it violated the assumption of the regression model. Firstly, tolerance values and values of variance inflation factor (VIF) were used to assess the degree of multicollinearity. As summarized in step 6 in Table 5.39, the resulting tolerance values are not below 0.10 and VIF values are not above 10.0. These indicate no violation of this assumption.

**Table 5.39- Partial correlations and stepwise estimations for hypothesis 12 (testing the effect of all *demographic, psychographic and normative influencing variables* on the dependent variable of purchase intentions)**

Stepwise regression for H12	Variables not in the model				Variables already in the model		
	Standardized coefficient (Beta In)	t-Stat	Sig T (p value)	Partial correlation	Standardized coefficient (Beta)	t-Stat	Sig T (p value)
<b>Dependent variables: Purchase intentions</b>							
<i>Stepwise estimation 1</i>							
<b>Demographic variables</b>							
Gender	-0.012	-0.261	0.794	-0.018			
Age	-0.002	-0.033	0.974	-0.002			
Education	0.062	1.241	0.216	0.088			
'Employed' (Employment status)	-0.001	-0.009	0.993	-0.001			
Managerial position	-0.064	-0.950	0.343	-0.067			
Marital status	0.023	0.429	0.669	0.030			
Family size	-0.024	-0.507	0.613	-0.036			
Income	0.013	0.237	0.813	0.017			
<b>Psychographic and normative influencing variables</b>							
Price consciousness	0.257	5.068	0.000	0.338			
Value consciousness	0.312	6.298	0.000	0.408			
Quality consciousness	-0.103	-2.215	0.028	-0.155			
Innovativeness	-0.084	-1.526	0.129	-0.108			
Market (price) mavenism	0.021	0.395	0.693	0.028			
Loyalty to other brands	0.000	0.005	0.996	0.000			
Variety seeking	0.044	0.967	0.335	0.068			
Need for cognition	-0.023	-0.459	0.647	-0.032			
<b>Deal proneness (1)*</b>	<b>0.408</b>	<b>7.156</b>	<b>0.000</b>	<b>0.452</b>	<b>0.665</b>	<b>13.111</b>	<b>0.000</b>
'Motivation to conform'	-0.012	-0.265	0.791	-0.019			
'Attitudes of reference groups'	0.143	2.757	0.006	0.192			
Adjusted R square	0.439						
F	171.908						
Sig. F	0.000						

\* Number in parenthesis indicates the order of entry of that variable into the regression model

**Table 5.39- Continued**

Stepwise regression for H12	Variables not in the model				Variables already in the model		
	Standardized coefficient (Beta In)	t-Stat	Sig T (p value)	Partial correlation	Standardized coefficient (Beta)	t-Stat	Sig T (p value)
<b>Dependent variables: Purchase intentions</b>							
<i>Stepwise estimation 2</i>							
<b>Demographic variables</b>							
Gender	-0.073	-1.436	0.153	-0.097			
Age	-0.055	-1.062	0.289	-0.072			
Education	-0.009	-0.166	0.868	-0.011			
'Employed' (Employment status)	0.038	0.746	0.456	0.051			
Managerial position	-0.137	-2.706	0.007	-0.181			
Marital status	-0.023	-0.452	0.652	-0.031			
Family size	0.055	1.077	0.283	0.073			
Income	-0.107	-2.122	0.035	-0.143			
<b>Psychographic and normative influencing variables</b>							
Price consciousness	0.281	5.343	0.000	0.342			
<b>Value consciousness (2)*</b>	<b>0.344</b>	<b>7.497</b>	<b>0.000</b>	<b>0.454</b>	<b>0.344</b>	<b>7.497</b>	<b>0.000</b>
Quality consciousness	-0.141	-2.830	0.005	-0.189			
Innovativeness	-0.046	-0.912	0.363	-0.062			
Market (price) mavenism	0.045	0.864	0.388	0.059			
Loyalty to other brands	0.006	0.116	0.908	0.008			
Variety seeking	0.075	1.471	0.143	0.100			
Need for cognition	0.181	3.668	0.000	0.242			
<b>Deal proneness (1)*</b>					<b>0.607</b>	<b>13.220</b>	<b>0.000</b>
'Motivation to conform'	-0.015	-0.294	0.769	-0.020			
'Attitudes of reference groups'	0.189	3.350	0.001	0.222			
Adjusted R square	0.553						
F	135.923						
Sig. F	0.000						

\* Number in parenthesis indicates the order of entry of that variable into the regression model



**Table 5.39- Continued**

Stepwise regression for H12	Variables not in the model				Variables already in the model		
	Standardized coefficient (Beta In)	t-Stat	Sig T (p value)	Partial correlation	Standardized coefficient (Beta)	t-Stat	Sig T (p value)
<b>Dependent variables: Purchase intentions</b>							
<i>Stepwise estimation 3</i>							
<b>Demographic variables</b>							
Gender	-0.064	-1.406	0.161	-0.096			
Age	-0.052	-1.123	0.263	-0.076			
Education	0.008	0.178	0.859	0.012			
'Employed' (Employment status)	0.069	1.512	0.132	0.103			
Managerial position	-0.111	-2.450	0.015	-0.165			
Marital status	-0.013	-0.280	0.780	-0.019			
Family size	0.001	0.020	0.984	0.001			
Income	-0.087	-1.919	0.056	-0.130			
<b>Psychographic and normative influencing variables</b>							
<b>Price consciousness (3)*</b>	<b>0.248</b>	<b>5.255</b>	<b>0.000</b>	<b>0.337</b>	<b>0.248</b>	<b>5.255</b>	<b>0.000</b>
<b>Value consciousness (2)*</b>	<b>0.323</b>	<b>7.420</b>	<b>0.000</b>				
Quality consciousness	-0.142	-3.198	0.001	-0.213			
Innovativeness	-0.110	-2.402	0.017	-0.162			
Market (price) mavenism	-0.027	-0.564	0.573	-0.038			
Loyalty to other brands	-0.042	-0.919	0.359	-0.063			
Variety seeking	0.040	0.861	0.390	0.059			
Need for cognition	0.040	0.797	0.427	0.054			
<b>Deal proneness (1)*</b>					<b>0.507</b>	<b>10.706</b>	<b>0.000</b>
'Motivation to conform'	-0.016	-0.357	0.721	-0.024			
'Attitudes of reference groups'	0.105	1.999	0.047	0.135			
Adjusted R square	0.602						
F	110.988						
Sig. F	0.000						

\* Number in parenthesis indicates the order of entry of that variable into the regression model

**Table 5.39- Continued**

Stepwise regression for H12	Variables not in the model				Variables already in the model		
	Standardized coefficient (Beta In)	t-Stat	Sig T (p value)	Partial correlation	Standardized coefficient (Beta)	t-Stat	Sig T (p value)
<b>Dependent variables: Purchase intentions</b>							
<i>Stepwise estimation 4</i>							
<b>Demographic variables</b>							
Gender	-0.062	-1.432	0.154	-0.097			
Age	-0.037	-0.862	0.390	-0.059			
Education	0.045	1.033	0.303	0.070			
'Employed' (Employment status)	0.052	1.191	0.235	0.081			
Managerial position	-0.070	-1.592	0.113	-0.108			
Marital status	-0.014	-0.321	0.748	-0.022			
Family size	-0.006	-0.131	0.896	-0.009			
Income	-0.029	-0.659	0.511	-0.045			
<b>Psychographic and normative influencing variables</b>							
<b>Price consciousness (3)*</b>					<b>0.266</b>	<b>5.681</b>	<b>0.000</b>
<b>Value consciousness (2)*</b>					<b>0.292</b>	<b>6.613</b>	<b>0.000</b>
Quality consciousness	-0.121	-2.863	0.005	-0.192			
Innovativeness	-0.110	-2.552	0.011	-0.172			
Market (price) mavenism	-0.043	-0.951	0.343	-0.065			
Loyalty to other brands	-0.046	-1.066	0.288	-0.073			
Variety seeking	0.017	0.393	0.695	0.027			
Need for cognition	-0.009	-0.175	0.861	-0.012			
<b>Deal proneness (1)*</b>					<b>0.436</b>	<b>8.268</b>	<b>0.000</b>
'Motivation to conform'	-0.051	-1.177	0.241	-0.080			
<b>'Attitudes of reference groups' (4)*</b>	<b>0.143</b>	<b>2.881</b>	<b>0.004</b>	<b>0.193</b>	<b>0.143</b>	<b>2.881</b>	<b>0.004</b>
Adjusted R square	0.615						
F	88.141						
Sig. F	0.000						

\* Number in parenthesis indicates the order of entry of that variable into the regression model

**Table 5.39- Continued**

Stepwise regression for H12	Variables not in the model				Variables already in the model		
	Standardized coefficient (Beta In)	t-Stat	Sig T (p value)	Partial correlation	Standardized coefficient (Beta)	t-Stat	Sig T (p value)
<b>Dependent variables: Purchase intentions</b>							
<i>Stepwise estimation 5</i>							
<b>Demographic variables</b>							
Gender	-0.042	-0.973	0.332	-0.667			
Age	-0.031	-0.727	0.468	-0.050			
Education	0.062	1.436	0.153	0.098			
'Employed' (Employment status)	0.039	0.907	0.365	0.062			
Managerial position	-0.053	-1.207	0.229	-0.082			
Marital status	-0.008	-0.176	0.860	-0.012			
Family size	-0.019	-0.444	0.658	-0.030			
Income	-0.015	-0.336	0.737	-0.023			
<b>Psychographic and normative influencing variables</b>							
<b>Price consciousness (3)*</b>					<b>0.253</b>	<b>5.462</b>	<b>0.000</b>
<b>Value consciousness (2)*</b>					<b>0.294</b>	<b>6.765</b>	<b>0.000</b>
<b>Quality consciousness (5)*</b>	<b>-0.119</b>	<b>-2.863</b>	<b>0.005</b>	<b>-0.193</b>	<b>-0.119</b>	<b>-2.862</b>	<b>0.005</b>
Innovativeness	-0.111	-2.632	0.009	-0.178			
Market (price) mavenism	-0.044	-0.979	0.329	-0.067			
Loyalty to other brands	-0.039	-0.902	0.368	-0.062			
Variety seeking	0.010	0.230	0.818	0.016			
Need for cognition	-0.025	-0.516	0.606	-0.035			
<b>Deal proneness (1)*</b>					<b>0.443</b>	<b>8.536</b>	<b>0.000</b>
'Motivation to conform'	-0.042	-0.979	0.329	-0.067			
<b>'Attitudes of reference groups' (4)*</b>					<b>0.141</b>	<b>2.880</b>	<b>0.004</b>
Adjusted R square	0.628						
F	74.521						
Sig. F	0.000						

\* Number in parenthesis indicates the order of entry of that variable into the regression model

**Table 5.39- Continued**

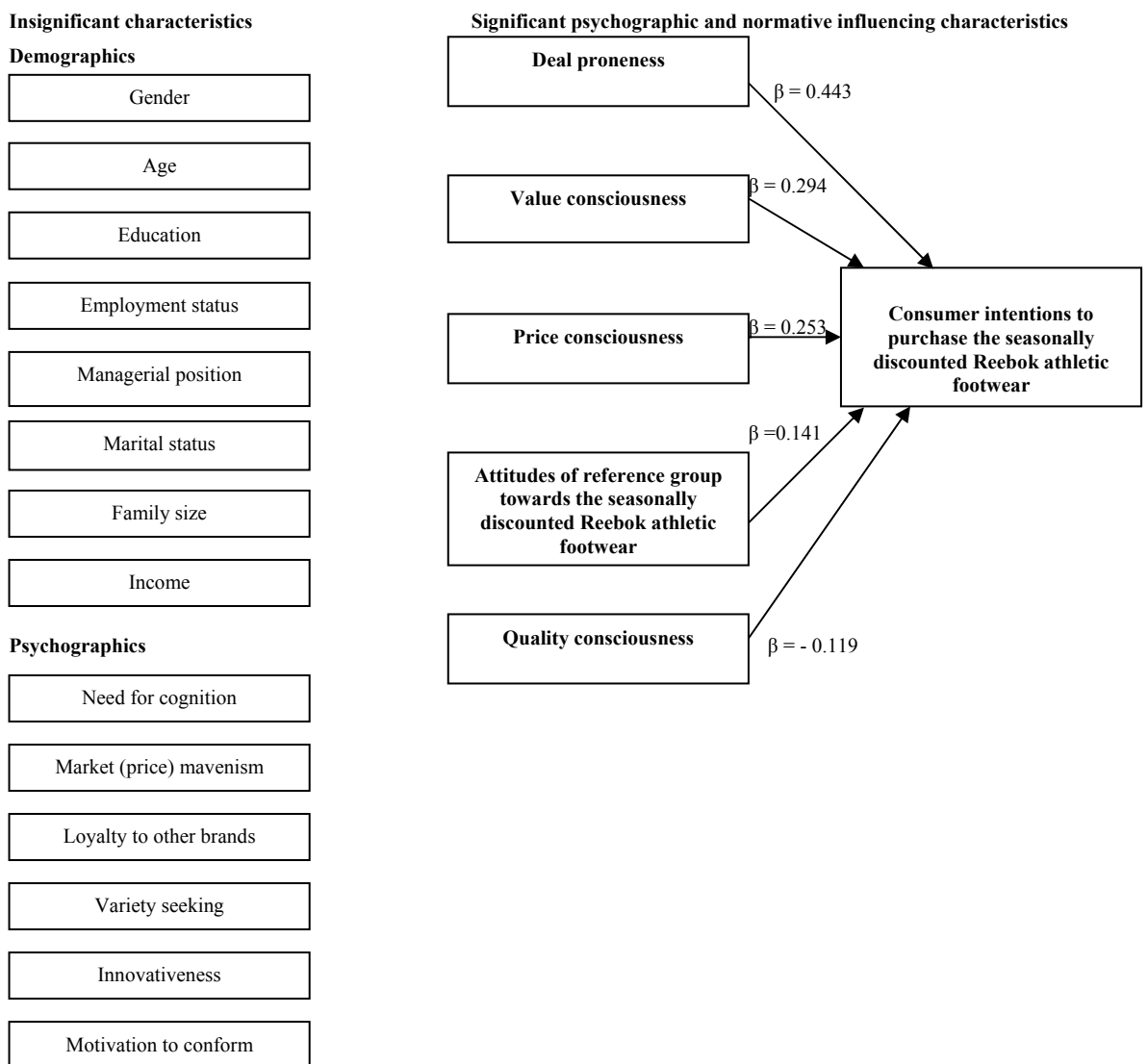
Stepwise regression for H12	Variables not in the model					
	Standardized coefficient (Beta In)	t-Stat	Sig T (p value)	Partial correlation	Tolerance values	VIF
<b>Dependent variables: Purchase intentions</b>						
<i>Stepwise estimation 6</i>						
<b>Demographic variables</b>						
Gender	-0.021	-0.500	0.625	-0.034	0.920	1.087
Age	-0.017	-0.391	0.696	-0.027	0.954	1.048
Education	0.068	1.589	0.114	0.108	0.939	1.066
'Employed' (Employment status)	0.042	1.005	0.316	0.069	0.958	1.044
Managerial position	-0.046	-1.052	0.294	-0.072	0.914	1.095
Marital status	0.002	0.047	0.963	0.003	0.980	1.020
Family size	-0.034	-0.800	0.425	-0.055	0.949	1.054
Income	0.002	0.055	0.956	0.004	0.894	1.118
<b>Psychographic and normative influencing variables</b>						
<b>Price consciousness (3)*</b>					0.795	1.258
<b>Value consciousness (2)*</b>					0.906	1.104
<b>Quality consciousness (5)*</b>					0.990	1.010
Innovativeness	-0.085	-1.957	0.052	-0.133	0.897	1.115
Market (price) mavenism	-0.027	-0.611	0.542	-0.042	0.878	1.139
Loyalty to other brands	-0.019	-0.448	0.654	-0.031	0.939	1.065
Variety seeking	0.016	0.371	0.711	0.025	0.957	1.045
Need for cognition	-0.027	-0.560	0.576	-0.039	0.765	1.307
<b>Deal proneness (1)*</b>					0.634	1.578
'Motivation to conform'	-0.025	-0.590	0.556	-0.040	0.947	1.056
<b>'Attitudes of reference groups' (4)*</b>					0.715	1.399
Adjusted R square						
F						
Sig. F						

\* Number in parenthesis indicates the order of entry of that variable into the regression model

Source: Analysis of survey data

Next data were assessed to determine if they violated assumptions inherent to linearity, homoscedasticity, and normality. As illustrated in Appendix 5.15, the probability plots show no major departures from the diagonal, and the residual plots show that the plots are randomly distributed around their mean of zero. These tools indicate no serious violations of these three assumptions. Therefore, hypothesis 12 was partly accepted. In general, these analytical results tend to support those indicated by the correlation analysis in the way that *psychographics* and *normative influencing variables* were much more likely to be influential in explaining **purchase intentions** than *demographics*. The model depicting the influence of all significant consumer characteristics on **purchase intentions** is illustrated in Figure 5.8.

**Figure 5.8- Model depicting the influence of all significant consumer characteristics on purchase intentions**



Source: Developed for this thesis

In summary, this section discussed how the proposed hypotheses were tested using the regression analysis. Firstly, in relation to the test of the influence of *demographic variables* on the *psychographic* and *normative influencing variables*, only a few relationships between these two variable groups were found in this analysis. That is, **income** was found to have a negative influence on **price consciousness**. **Age** and **education** was seen to have a positive impact on **market (price) mavenism** and **innovativeness**, respectively. **Employment status** was shown to have a significant influence on ‘**motivation to conform**’. Specifically, employed respondents were less likely to be motivated to conform to expectations of reference groups than those who were self-employed. However, all of the relationships found between these variables appeared to be weak. Overall, this indicates that *demographic variables* were unlikely to have a strong relationship with *psychographic* and *normative influencing variables* for this sample.

The discussion then turned to the test of the influence of *psychographic* and *normative influencing variables* on the single dependent variable (**consumer intentions to purchase the seasonally discounted Reebok athletic footwear**). Six out of eleven relevant hypotheses were found to be accepted. Particularly, **price consciousness**, **deal proneness**, **value consciousness**, and ‘**attitudes of reference groups**’ were shown to have a positive influence on **purchase intentions**, whereas **quality consciousness** and **innovativeness** were seen to have a negative impact on this dependent variable. In contrast, **need for cognition**, **market (price) mavenism**, **loyalty to other athletic footwear brands**, **variety seeking**, and ‘**motivation to conform**’ were not found to have any significant associations with **purchase intentions**.

The analysis then moved to the last hypothesis, which proposed to examine the effect of all *demographic*, *psychographic*, and *normative influencing variables* on the variable of **purchase intentions**. The stepwise regression method was employed to test these relationships in order to minimize the inter-correlation issue. The results appeared to support those indicated in the previous hypothesis testing section. That is, *psychographic* and *normative influencing variables* still played a key role in explaining **purchase intentions**. Particularly, **deal proneness**, **value consciousness**, **price consciousness**, and ‘**attitudes of reference groups**’ were found to have a positive influence on **purchase intentions**, whereas **quality consciousness** was seen to have a

negative impact on this dependent variable. Nonetheless, **innovativeness, need for cognition, market (price) mavenism, loyalty to other athletic footwear brands, variety seeking,** and **‘motivation to conform’** were not seen to be related with **purchase intentions**.

The stepwise regression analysis also enabled the researcher to compare the relative importance of the significant antecedent variables when these variables were taken into account into the regression model. **Deal proneness** was seen to be the most important antecedent variable based on its strongest influence (highest standardized correlation value) on **purchase intentions**, and this antecedent variable was followed by **value consciousness, price consciousness, ‘attitudes of reference groups’,** and **quality consciousness**. On the other hand, *demographic variables* were shown not to have a significant effect on **purchase intentions** in this sample.

## 5.7 Conclusions

This chapter has discussed how the collected data were prepared, purified, and analyzed to test the hypotheses proposed in Chapter 3. Firstly, the profile of respondents was explored. The issues of representativeness of the samples and non-response error were assessed. It could be seen that this sample was not statistically representative of the 2002 Super Sports database. Next, the collected data were screened to ensure the accuracy and the completeness of the collected data. Missing data, outliers, and non-normal data were handled.

The discussion then turned to descriptive statistics regarding the respondents’ intentions to purchase the seasonally discounted Reebok athletic footwear, as well as their *psychographic* and *normative influencing characteristics*. The measures used in this research were then tested to determine if the scales were reliable, uni-dimensional, and valid by using the factor analysis technique. To purify the measurement, only one out of forty one items (item 3.20) was removed. Some items (items 3.12, 3.16, 3.17, 3.28, 3.29, 3.32, and 3.42) were found to be unreliable and/or multi-dimensional measures, but they were retained in the analysis as deleting these poor items did not help improve quality of the measures. Purified data were aggregated using the principle component analysis technique, and these aggregated data were then used as the input for the test of the proposed hypotheses using the regression analysis.

Based on the results of the regression analysis, *demographics variables* were not found to have a strong influence on *psychographic* and *normative influencing variables*, and **purchase intentions**. On the other hand, *psychographic* and *normative influencing variables* were shown to have a significant effect on **purchase intentions**. Particularly, **price consciousness, deal proneness, value consciousness, and ‘attitudes of reference groups’** could positively influence **purchase intentions**, and **quality consciousness** could negatively influence this dependent variable. From these five antecedent variables, **deal proneness** was seen to be the most important antecedent variable, based on its highest relationship with **purchase intentions**. This antecedent variable was followed by **value consciousness, price consciousness, ‘attitudes of reference groups’, and quality consciousness**.



# CHAPTER 6

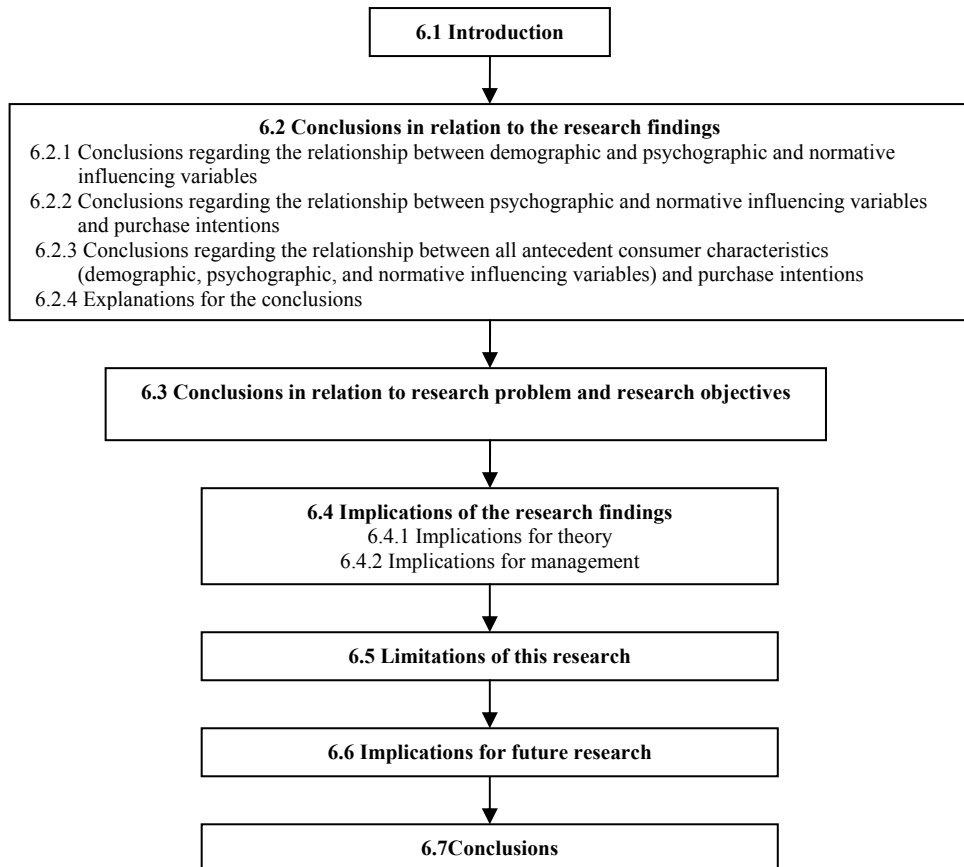
## Conclusions and Implications

### 6.1 Introduction

The previous chapter analyzed the collected data and reported the research results. This chapter will draw conclusions and discuss implications based on the results of this research project.

There are six sections in this chapter as outlined in Figure 6.1. Discussed in the first section is the introduction summarizing the earlier stages of this research program (section 6.1). The discussion then turns to conclusions in relation to the research findings in section 6.2, and this is followed by conclusions regarding the research problem and research objectives (section 6.3). Implications of the research findings for both theory and management will be discussed in section 6.4. Limitations of this research and implications for future research will be addressed in section 6.5 and 6.6 respectively. Finally, an overall conclusion of this research is made in section 6.7.

**Figure 6.1- Outline of chapter 6**



Source: developed for this thesis

Chapter 1 provided a background for this research. The research problem was addressed in section 1.2, as follows:

*“How do consumer characteristics influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market?”*

Justifications for this research were given and they included: a lack of prior research which incorporated all relevant antecedent consumer characteristics relating to both utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975); limited research investigating the relationship between antecedent consumer characteristics; research conducted in limited contexts; and a lack of research based on probability sampling techniques that could be generalized to an industry or to a managerial application.

Following this, chapter 2 reviewed the literature relating to sales promotions targeted to end-user consumers and considered findings relating to consumer responses to products promoted through sales promotion. This chapter explored two key behavioral theories most relevant to this research topic, namely: utility theory (Thaler 1985); and the theory of reasoned action (Fishbein & Ajzen 1975) as the parent discipline. Key consumer characteristics relating to *demographics, psychographics, and normative influencing characteristics* and the influence of these factors on consumer responses to products promoted through sales promotions were also discussed as the immediate discipline. Preliminary hypotheses depicting the influence of these factors on consumer intentions to purchase the seasonally discounted Reebok athletic footwear were developed at the end of chapter 2.

Chapter 3 then presented and justified the methodology and reported the findings of the exploratory research that was conducted mainly to gain additional insight into consumer characteristics most relevant to the investigated research context (consumer responses to the seasonally discounted athletic footwear, at the brand level; Reebok, and in the Thai market), and to determine the appropriateness of the use of **purchase intentions** as the single key response variable. In depth interviews were conducted with four experts, including three executives from Reebok and one from Super Sports. The collected data were analyzed using content analysis techniques. The findings of this exploratory

research were enhanced with the relevant information discussed in the literature (section 2.4) for the final selection of the key consumer characteristics and normative influencing factors most relevant to the athletic footwear context. At the end of this chapter, a final list of hypotheses was proposed.

Methodology of the survey research was detailed in chapter 4. The discussion began with justifications of the selection of the descriptive research design with the mail survey approach. The sample selection and the measurement process were proposed. The discussion then turned to the questionnaire development process and steps of survey administration. The developed questionnaire was pretested and the process followed was outlined. Finally, procedures used to prepare and analyze collected data were addressed.

Next, collected data were analyzed and the results of this analysis were reported in chapter 5. This chapter began with a profile and analysis of respondents in order to determine representativeness of the samples and to assess non-response error. The data preparation strategies of screening and cleaning were conducted in order to ensure the accuracy and the completeness of the collected data. Data were then assessed for missing responses, outliers, and normality. The discussion then turned to descriptive statistics regarding the respondents' intentions to purchase the seasonally discounted Reebok athletic footwear, as well as their psychographic and normative influencing characteristics. The scales used to collect the data were examined for reliability, dimensionality, and validity, using confirmatory factor analysis techniques, and they were purified. As a result, only one out of forty one items (item 3.20) was removed. Purified data were combined using the principle component analysis technique, and these aggregated data were used to test proposed hypotheses using regression estimation techniques.

In general, results of the regression analysis indicated that *demographic variables* were not significant in influencing either *psychographic* or *normative influencing variables* in relation to **purchase intentions**. In contrast, some specific *psychographic* and *normative influencing variables* were shown to have a significant effect on **purchase intentions**. These variables included **price consciousness, deal proneness, value consciousness, 'attitudes of reference groups', and quality consciousness**. From these five antecedent variables, **deal proneness** was found to be the most important

antecedent variable because it had the highest relationship with **purchase intentions**, and this antecedent variable was followed by **value consciousness**, **price consciousness**, **'attitudes of reference groups'**, and **quality consciousness**.

Finally, this last chapter will provide conclusions for this thesis, commencing with the conclusions regarding the findings of this research.

## **6.2 Conclusions regarding the research findings**

Conclusions emerging from this research program are described in this section. There are four subsections to be discussed, including conclusions about the relationship between *demographic* and *psychographic* and *normative influencing variables* (section 6.2.1), conclusions about the relationship between *psychographic* and *normative influencing variables* and **purchase intentions** (section 6.2.2), conclusions about the relationship between all antecedent consumer characteristics (eight *demographic*, and eleven *psychographic* and *normative influencing variables*) and **purchase intentions** (section 6.2.3). This section ends with explanations of the conclusions (section 6.2.4).

Hypotheses concerning the influence of these *demographic* and *psychographic* and *normative influencing variables* on **purchase intentions** were developed in this thesis in section 2.4.3 and were revised in section 3.4.2. They incorporated aspects of both utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975). These hypotheses were also based on a review of literature (chapter 2) as well as the insights gained from the exploratory research (chapter 3). Thus, the hypotheses were both theoretically and empirically based. These hypotheses were tested in section 5.6.

The results of this research are compared to that of previous studies as shown in Table 6.1. The table is led by the lists of hypothesis which were tested and conclusions about these results will be discussed in sections 6.2.1, 6.2.2, and 6.2.3. The second and third columns indicate sources of propositions (the literature and/or the exploratory research). Analytical results are summarized in the fourth column. Overall, the table shows that the findings of this research did not support most of the hypotheses stating the influence of *demographics* on either *psychographic* or *normative influencing characteristics* or **purchase intentions**, but were likely to support those expecting the impact of *psychographic* and *normative influencing characteristics* on **purchase intentions**.

**Table 6.1- Comparisons of the results of this research to that of previous studies**

Propositions	Sources		
	The literature (previous studies)	The exploratory research	The results of this research
<b>Section 6.2.1 (The relationship between demographic and psychographic and normative influencing variables)</b>			
H1A: Income will negatively influence price consciousness, and	✓		✓
H1B: Family size will positively influence price consciousness, and		✓	✗
H1C: There is a difference in price consciousness across marital status.		✓	✗
H2: Female consumers are more likely than male to be deal prone.	✓		✗
H3: Education will positively influence need for cognition.	✓		✗
H4: Education will positively influence variety seeking.	✓		✗
H5: Education will positively influence quality consciousness.	✓		✗
H6: Age will positively influence market (price) mavenism.	✓		✓
H7A: Age will positively influence value consciousness, and		✓	✗
H7B: There is a difference in value consciousness across marital status.		✓	✗
H8: Age will negatively influence brand loyalty to other athletic footwear brands.		✓	✗
H9A: Education will positively influence innovativeness, and		✓	✓
H9B: Age will negatively influence innovativeness		✓	✗
H10A: There is a difference in the level of motivation to conform to the expectations of reference groups across employment status, and	✓		✓
H10B: Age will negatively influence motivation to conform to the expectations of reference groups, and	✓		✗
H10C: Managerial position will positively influence motivation to conform to expectations of reference groups.		✓	✗
<b>Section 6.2.2 (The relationship between psychographic and normative influencing variables and purchase intentions)</b>			
H11A: Price consciousness will positively influence purchase intentions,	✓	✓	✓
H11B: Deal proneness will positively influence purchase intentions,	✓	✓	✓
H11C: Need for cognition will negatively influence purchase intentions,	✓	✓	✗
H11D: Market (price) mavenism will positively influence purchase intentions,	✓	✓	✗
H11E: Quality consciousness will negatively influence purchase intentions,	✓	✓	✓
H11F: Value consciousness will positively influence purchase intentions,	✓	✓	✓
H11G: Loyalty to other athletic footwear brands will negatively influence purchase intentions,	✓	✓	✗
H11H: Variety seeking will positively influence purchase intentions,	✓	✓	✗
H11I: Innovativeness will negatively influence purchase intentions,	✓	✓	✓
H11J: 'Attitudes of reference groups' will positively influence purchase intentions, and	✓	✓	✓
H11K: 'Motivation to conform' will negatively influence purchase intentions.	✓	✓	✗
<b>Section 6.2.3 (The relationship between all antecedent consumer characteristics and purchase intentions)</b>			
H12: There will be no influence of all investigated antecedent consumer characteristics on purchase intentions			
<b>Demographic variables</b>			
Income	✓	✓	✗
Family size	✓	✓	✗
Marital status	✗	✓	✗
Gender	✓	✓	✗
Education	✓	✓	✗
Age	✓	✓	✗
Employment status	✓	✓	✗
Managerial position	✗	✓	✗
<b>Psychographic and normative influencing variables</b>			
Price consciousness	✓	✓	✓
Deal proneness	✓	✓	✓
Need for cognition	✓	✓	✗
Market (price) mavenism	✓	✓	✗
Quality consciousness	✓	✓	✓
Value consciousness	✓	✓	✓
Loyalty to other athletic footwear brands	✓	✓	✗
Variety seeking	✓	✓	✗
Innovativeness	✗	✓	✗
'Attitudes of reference groups'	✓	✓	✓
'Motivation to conform'	✓	✓	✗

Remarks: ✓ = supported by those studies, ✗ = not supported by those studies

Source: Developed for this thesis from this research findings

Next, the conclusions regarding the influence of demographic on psychographic and normative influencing variables are addressed.

### **6.2.1 Conclusions regarding the relationship between *demographic* and *psychographic* and *normative influencing variables***

In this section, conclusions will be made for hypotheses proposed to test the influence of *demographic variables* on *psychographic* and *normative influencing variables*, commencing with hypothesis 1.

#### **Conclusions about the relationship between income (Hypothesis 1A), marital status (Hypothesis 1B), family size (Hypothesis 1C) and price consciousness**

In chapters 2 and 3, a negative relationship between **income** (hypothesis 1A) and a positive relationship between **family size** (hypothesis 1B) and **price consciousness** were hypothesized. In addition, it was also expected that there would be a difference in **price consciousness** with **marital status** (hypothesis 1C). The negative relationship between **income** and **price consciousness** was expected because lower income consumers were considered to be less likely to perceive themselves to be financially well off (Mittal 1994), and were more likely to be financially constrained than those with higher income (Ailawadi et al. 2001). Due to this justification, lower income consumers were expected to become more price conscious than higher income consumers in this research.

The relationship between **family size**, **marital status** and **price consciousness** were not indicated in the literature but were suggested to be tested by the exploratory research. **Family size** of respondents was forecasted to positively influence **price consciousness** because consumers with a smaller family size were expected to be less constrained in their budgets and less price conscious than those with a larger family size. In addition, as justified by the exploratory research, **marital status** was deemed to have an influence on **price consciousness** in the way that married consumers were predicted to have a higher income than single consumers due to the occurrence of two incomes. It was therefore proposed that married consumers would be less likely to look for monetary savings and to be less price conscious than single consumers.

The findings of this research partly supported this hypothesis. Specifically, only hypothesis 1A was accepted while the other two hypotheses (hypotheses 1B and 1C)

were not supported. It was therefore concluded that **income** had a negative (but weak) influence on **price consciousness**. On the other hand, **family size** and **marital status** were not found to have a significant relationship with **price consciousness**. As a result, **family size** and **marital status** are not considered to be influential in explaining **price consciousness** in this research. A possible explanation for the lack of association between **family size**, **marital status** and **price consciousness** will be given in section 6.2.4.

### **Conclusions about the relationship between gender and deal proneness (Hypothesis 2)**

**Gender** was expected to have an influence on **deal proneness**. Particularly, female consumers were hypothesized to be more deal prone than males (Blattberg et al. 1978). However, the results of this research do not support this hypothesis as it did not find a significant difference in **deal proneness** between male and female respondents. Therefore, it was concluded that female consumers were unlikely to be more deal prone than male consumers in this research. A possible explanation for this finding will be addressed in section 6.2.4.

### **Conclusions about the relationship between education and need for cognition (Hypothesis 3), variety seeking (Hypothesis 4), quality consciousness (Hypothesis 5)**

In the literature, **education** was found to have an association with particular **psychographic variables**. In relation to **need for cognition**, higher educated consumers were found to have a higher **need for cognition**, and to be associated with more extensive information processing. On the other hand, lower educated consumers were likely to have a lower **need for cognition** (Ailawadi et al. 2001). Therefore, **education** was expected to have a positive influence on **need for cognition**.

Regarding **variety seeking**, the association between this **psychographic characteristic** and any particular **demographic variable** has not been strongly supported in the literature reviewed. Recent research aimed to identify **demographic variables** that possibly related to **variety seeking** but did not find any significant relationship between these two variables (Ailawadi et al. 2001). However, a positive relationship between **education** and **variety seeking** was predicted based on the findings of an early study (Raju 1980). In addition, **education** was also expected to have a positive influence on

**quality consciousness** as higher educated consumers were shown to be more quality conscious than those who were lower educated (Ailawadi et al. 2001).

However, this research did not support all of these three hypotheses. **Education** was not found to be significantly related with any of these three **psychographic variables**. Therefore, **education** was not considered to be a key demographic factor influencing **need for cognition, variety seeking, or quality consciousness**. The difference in the findings of this research and of previous studies will be explained in section 6.2.4.

### **Conclusions about the relationship between age and market (price) mavenism (Hypothesis 6)**

Older consumers were expected to have more price maven characteristics than younger consumers as they searched more about relevant information, and were more likely to provide significant information to others. This expectation was supported by a number of different studies (Ailawadi et al. 2001; and Urbany, Dickson & Karapurakal 1996) that found similar associations between these two variables. Thus, age was hypothesized to positively influence market **(price) mavenism** in this research.

The results of this research supported this hypothesis as a significant and positive relationship was found between these two variables. However, the relationship was considered weak due to the low value of Beta (Beta = 0.085,  $p < 0.05$ ). Statistically, it was concluded that **age** was a key demographic factor that had a (weak) positive impact on **market (price) mavenism**.

### **Conclusions about the relationships between age (Hypothesis 7A), marital status (Hypothesis 7B) and value consciousness**

**Age** and **marital status** have not been indicated to be associated with **value consciousness** by the literature, but the relationship between these two demographic variables and **value consciousness** was suggested by the exploratory research. It was expected that older consumers would be more likely than younger consumers to become rational and to trade off between benefits received and the price to pay for a product. Therefore, **age** was expected to positively influence **value consciousness**.



In addition, the exploratory research also suggested that consumers with different **marital status** were likely to be varied in being value conscious. Specifically, married consumers were more likely to be value conscious than unmarried consumers. Therefore a difference in **value consciousness** was predicted to exist across **marital status**.

However, the results of this research did not support these hypotheses. In addition, **age** and **marital status** were not found to have a significant relationship with **value consciousness**. Therefore, **age** and **marital status** were not deemed to be key **demographic factors** that affected **value consciousness**. The lack of support of these hypotheses will be justified in section 6.2.4.

#### **Conclusions about the relationship between age and loyalty to other athletic footwear brands (Hypothesis 8)**

**Brand loyalty** has not been indicated to be associated with any *demographic variables* by the literature. However, the negative relationship between **age** and **loyalty to other athletic footwear brands** was hypothesized based on suggestions by the exploratory research findings. That is, younger consumers would be more likely than older consumers to follow a trend of fashion, and in turn would be likely to develop a stronger commitment to a particular well-known athletic footwear brand. If they were loyal to other athletic footwear brand(s), they would be less likely to intend to purchase the seasonally discounted Reebok athletic footwear due to their perceptions of high switching costs. Thus, **age** was expected to have a negative relationship with **loyalty to other athletic footwear brands**.

The results of this research did not confirm the relationship between these two variables since a significant relationship between **age** and the variable of **loyalty to other athletic footwear brands** was not evident in the analysis. Thus, this finding is in contrast to the proposed hypothesis. It was therefore concluded that **age** was not a key *demographic factor* influencing **loyalty to other athletic footwear brands**. This finding will be further discussed in section 6.2.4.

### **Conclusions about the relationships between education (Hypothesis 9A), age (Hypothesis 9B) and innovativeness**

**Innovativeness** was not indicated to be an influential factor by the literature but was suggested to be a key *psychographic factor* that could have an effect on **purchase intentions** by the exploratory research. In relation to the association between **innovativeness** and *demographic variables*, the exploratory research suggested a positive relationship between **education** and **innovativeness** because highly educated consumers were more likely to accept change including new products (Ailawadi et al. 2001; Hawkins et al. 1998). In addition, a negative relationship between **age** and **innovativeness** was hypothesized because younger consumers were expected to be more accepting of change than others and in turn were more likely to be innovative than older consumers.

The results of this research confirmed only the negative relationship between **education** and **innovativeness** (hypothesis 9A), indicating **education** to be the only key demographic variable that had a significant (but weak) negative influence on **innovativeness** (Beta = -0.123,  $p < 0.01$ ). On the other hand, the proposed relationship between **age and innovativeness** (hypothesis 9B) was not supported since the predicted relationship between these two variables was not significant. Consequently, **education** was considered to be a key demographic factor that had a negative influence on **innovativeness** whereas **age** was not an influential factor. A justification of the lack of support of hypothesis 9B will be given in section 6.2.4.

### **Conclusions about the relationships between employment status (Hypothesis 10A), age (Hypothesis 10B), managerial position (Hypothesis 10C) and motivation to conform to expectations of reference groups**

**Employment status** and **age** were indicated to be related with ‘**motivation to conform**’ by the literature. A difference in ‘**motivation to conform**’ was assumed to exist across **employment status** where, for example, students were expected to be more concerned with their self-image than retired groups. Students could be more likely to interact with others and would want to be a part of their social group (Mowen & Minor 1998).

In respect to **age**, a negative relationship between **age** and ‘**motivation to conform**’ was suggested (Schlossberg 1993). However, this suggestion was argued by research

undertaken by Ailawadi et al. (2001) indicating that the older the consumers, the more they were likely to be motivated to conform to the expectations of their reference groups. This research supported the suggestion by Schlossberg (1993) and proposed to test a negative relationship between **age** and **'motivation to conform'**.

For **managerial position** in the organization, only the exploratory research suggested that consumers working at a higher managerial level were likely to be more concerned about their self-image, and thus be more motivated to conform to expectations of reference groups than those who worked at a lower management level. They were more likely to take into account expectations and attitudes of reference groups towards the seasonally discounted Reebok athletic footwear in their purchase decisions. It was therefore expected that **'managerial position'** would have a positive influence on **'motivation to conform'**.

However, the findings of this research supported only hypothesis 10A and disconfirmed the other two (hypotheses 10B and C). In relation to the relationship between **employment status** and **'motivation to conform'**, it was found that employed respondents were less likely to be motivated to conform to expectations of reference groups than those who were self-employed. However, the findings indicated no significant relationship between **age**, **managerial position** and **'motivation to conform'**. It was thus concluded that only employment status would be a key influential factor that explained the variance in **'motivation to conform'**. The difference in the findings of this research and the literature will be explained in section 6.2.4.

In brief, this section discussed and compared the results in relation to the influence of *demographic* or *psychographic* and *normative influencing variables* of this research to hypotheses proposed based on findings of both previous studies and the exploratory research. In general, this research's findings did not support most of the proposed hypotheses and further that *demographic variables* were not seen to have a strong influence on *psychographic* and *normative influencing variables*. Next, conclusions regarding the influence of *psychographic* and *normative influencing variables* on **purchase intentions** will be addressed.

### 6.2.2 Conclusions regarding the relationship between *psychographic* and *normative influencing variables* and purchase intentions (Hypothesis 11A to Hypothesis 11K)

In this section, conclusions will be made for hypotheses proposed to test the influence of all 11 *psychographic* and *normative influencing variables* on **purchase intentions**. These *psychographic* and *normative influencing variables* include **price consciousness, deal proneness, need for cognition, market (price) mavenism, quality consciousness, value consciousness, loyalty to other athletic footwear brands, variety seeking, innovativeness, ‘attitudes of reference groups’, and ‘motivation to conform’**.

Based on utility theory (Thaler 1985), the theory of reasoned action (Fishbein & Ajzen 1975), and findings of both the studies reviewed in the literature and the exploratory research, 11 hypotheses were developed in chapters 2 and 3, predicting the influence of each of these variables on **purchase intentions**, and they were tested simultaneously in chapter 5.

Based on the monetary saving concept of utility theory (Thaler 1985), **price consciousness** was expected to have a positive relationship with **purchase intentions** (hypothesis 11A) because price conscious consumers were likely to seek monetary savings (Ailawadi et al. 2001; Mittal 1994). Purchasing a discounted product was likely to satisfy these consumers as they could receive immediate price savings from this purchase (Ailawadi et al. 2001).

From the point of view of convenience utility, **deal proneness** was also expected to have a positive impact on **purchase intentions** (hypothesis 11B) because a price discount could help deal prone consumers to minimize their decision costs by providing them with an easier decision heuristic for a product purchase (Ailawadi et al. 2001; Wansink et al. 1998). Deal prone consumers made their purchase decisions based on the availability of sales promotions offered by various brands. They were likely to shift their consumption behavior to take advantage of the temporary incentive (Wakefield & Barnes 1996).

In respect to **need for cognition**, this psychographic variable was expected to have a negative relationship with **purchase intentions** (hypothesis 11C) based on convenience utility. Consumers with a higher need for cognition might be more likely to scrutinize messages very carefully, and were less likely to rely on a less complicated promotional message (specifically for this research the seasonal discounting programs of Reebok) than those with lower need for cognition. In turn, they were less likely to react favorably to discounted products (Hoyer & MacInnis 1997; Mowen & Minor 1998).

In relation to **market (price) mavenism**, this psychographic variable was predicted to have a positive impact on **purchase intentions** (hypothesis 11D) based on an explanation from convenience utility. That is, market maven consumers tended to realize that they did not have to spend more time and effort on searching for the next price promotion.

Based on the product quality concept of utility theory (Thaler 1985), quality conscious consumers tended to perceive the price of a product positively and inferred that the level of the price was positively related to the level of product quality (Erickson & Johansson 1985; Lichtenstein & Ridgway 1993). These consumers tend to view higher priced products more favorably due to their perceptions of an increase in product quality for additional monetary payment. (Lichtenstein et al. 1988; Lichtenstein & Ridgway 1993). Therefore, **quality consciousness** was predicted to have a negative effect on **purchase intentions** (hypothesis 11E).

Based on perceived value of a purchase of promoted products, a price promotion program not only leads value conscious consumers to perceive additional value for their money (higher ratio of quality received to price paid), but also enables these consumers to relax their budget constraints, and to upgrade to a better product (Chandon et al. 2000). With these justifications, **value consciousness** was hypothesized to have a positive impact on **purchase intentions** (hypothesis 11F).

The concept of costs of switching was used to explain a negative relationship between **loyalty to other athletic footwear brands** and **purchase intentions**. It was noted that brand loyal consumers would be more likely to feel a greater degree of switching costs (Ailawadi et al. 2001) because they would perceive the risk of a large loss in potential

utility from having to substitute a less-preferred brand for their favorite brand (Bawa & Shoemaker 1987). Brand loyal consumers are likely to perceive that they already received a good deal from buying the preferred brand than those who are less loyal. Thus, they would be unlikely to be interested in other brands' marketing efforts, and switch to other brands (Wakefield & Barnes 1996). With these explanations, **loyalty to other athletic footwear brands** was hypothesized to have a negative influence on **purchase intentions** (hypothesis 11G).

Examination of exploration utility, variety seeking consumers have been found to positively respond to products promoted through sales promotions (McCann 1974; Wakefield & Barnes 1996) because sales promotions encourage them to try the promoted product (Ailawadi et al. 2001; Montgomery 1971). Variety seekers were expected to respond favorably to the seasonally discounted Reebok athletic footwear as seasonal discounting programs would encourage them to try the Reebok athletic footwear in order to fulfill their needs for variety and reduce their boredom. Thus, **variety seeking** was predicted to have a positive relationship with **purchase intentions** (hypothesis 11H).

In relation to **innovativeness**, this psychographic variable was indicated to be a key factor that could influence **purchase intentions** based on the findings of the exploratory research. The concept of perceived exploration utility was employed to develop the hypothesis stating the relationship between these two variables. Innovative consumers tended not to be interested in the seasonally discounted products because they perceived discounted products as old or out of date. Buying discounted products would not fulfill their needs for innovation. In this research, **innovativeness** was therefore expected to have a negative effect on **purchase intentions** (hypothesis 11I).

The association between two **normative influencing variables** and **purchase intentions**, based on the theory of reasoned action (Fishbein & Ajzen 1975), '**attitudes of reference groups**' was expected to have a positive effect on **purchase intentions** (hypothesis 11J) because consumers who needed to be a part of the group would conform to group norms (Hawkins et al. 1998). If consumers conform to group norms, they would take into account the norms of their reference group, and were likely to behave accordingly (Shimp & Kavas 1984). In addition, '**motivation to conform**' was

predicted to be negatively related with **purchase intentions** (hypothesis 11K) based on the findings of a more recent study indicating a negative relationship between **‘motivation to conform’** and consumers’ use of products promoted through out-of store promotions (Ailawadi et al. 2001).

The results of this research support specific hypotheses (hypotheses 11A, 11B, 11E, 11F, 11I, and 11J) and disconfirm the others (hypotheses 11C, 11D, 11G, 11H, and 11K). From all eleven investigated *psychographic* and *normative influencing variables*, only six *psychographic* and *normative influencing variables* were indicated to have a significant influence on **purchase intentions**. They include **price consciousness, deal proneness, quality consciousness, value consciousness, innovativeness, and ‘attitudes of reference groups’**. As hypothesized, **price consciousness** (hypothesis 11A), **deal proneness** (hypothesis 11B), **value consciousness** (hypothesis 11F), and **‘attitudes of reference groups’** (hypothesis 11J) were found to have a significantly positive relationship with **purchase intentions**, whilst the influences of **quality consciousness** and **innovativeness** on **purchase intentions** were found to be significant and negative. These also support the relevant hypotheses (hypotheses 11E and 11I, respectively).

By considering Beta values of these influential **psychographic** and **normative influencing variables**, **deal proneness** was shown to be the most important factor that could have an influence on **purchase intentions**, and it was followed by **value consciousness, price consciousness, ‘attitudes of reference groups’, quality consciousness, and innovativeness**, respectively.

In contrast, **need for cognition** (hypothesis 11C), **market (price) mavenism** (hypothesis 11D), **loyalty to other athletic footwear brands** (hypothesis 11G), **variety seeking** (hypothesis 11H), and **‘motivation to conform’** (hypothesis 11K) were not found to have a significant influence on **purchase intentions**. As a result, these five variables were not considered influential in explaining **purchase intentions**. Consequently, the relevant hypotheses were not confirmed. Possible explanations for these hypothesis disconfirmations will be given in section 6.2.4. The discussion now turns to conclusions about the influence of all eight *demographic*, and eleven *psychographic* and *normative influencing variables* on **purchase intentions**.

### **6.2.3 Conclusions regarding the relationship between all antecedent consumer characteristics (eight demographic and eleven psychographic and normative influencing variables) and purchase intentions**

It appears that none of the previous studies have simultaneously investigated the effect of all possible consumer characteristics on consumer response variables. To fill this gap, this research has incorporated all possible eight *demographic variables* (**income, family size, marital status, gender, education, age, employment status, and managerial position**), and eleven *psychographic* and *normative influencing variables* (**price consciousness, deal proneness, need for cognition, market (price) mavenism, quality consciousness, value consciousness, loyalty to other athletic footwear brands, variety seeking, innovativeness, ‘attitudes of reference groups’, and ‘motivation to conform’**) and has examined the effect of these variables on **purchase intentions**. In this section, conclusions will be made for the last hypothesis (hypothesis 12: there will be no influence of all eight *demographic variables*, and eleven *psychographic* and *normative influencing variables* on the variable of **purchase intentions**).

Based on the findings of this research, all eight *demographic variables* were not found to have a significant influence on **purchase intentions**. Although these results are inconsistent with the findings of previous research (Ailawadi et al. 2001; Mittal 1994), they are supported by a recent study, investigating consumer intentions to purchase clothing products promoted through discounting coupons, and indicating no significant relationships between *demographic variables* and behavioral intentions (Cho & Kang 1998). It was therefore concluded for this research that **income, family size, marital status, gender, education, age, employment status, and managerial position** were not influential in explaining **purchase intentions** in relation to the seasonally discounted Reebok athletic footwear.

In relation to the effect of *psychographic* and *normative influencing variables* on **purchase intentions**, the results of this research are consistent with those discussed in the previous section (section 6.2.2), indicating that **deal proneness, value consciousness, price consciousness, and ‘attitudes of reference groups’** had a positive influence on **purchase intentions**, and **quality consciousness** had a significant but negative relationship with **purchase intention**. However, **innovativeness** was not found



to have a significant influence on **purchase intentions**, and this is contrast to the results discussed in section 6.2.2.

In terms of the level of importance of the influential variables, **deal proneness** was shown to be the most important antecedent variable that had the strongest positive influence on **purchase intentions**, and it was followed by **value consciousness**, **price consciousness**, and **'attitudes of reference groups'** respectively. In addition, **quality consciousness** was found to be the least influential variable with a negative impact on **purchase intentions**. Regardless of the insignificant effect of **innovativeness** on **purchase intentions**, these results are likely to be consistent with the results discussed in section 6.2.2, and they partly confirmed hypothesis 12.

In brief, for this research, only five specific *psychographic* and *normative influencing variables* (**deal proneness**, **value consciousness**, **price consciousness**, **'attitudes of reference groups'**, and **quality consciousness**) are considered the key antecedent consumer characteristics influencing consumer intentions to purchase the seasonally discounted Reebok athletic footwear. On the other hand, none of the *demographic variables* are considered influential in explaining **purchase intentions**. Next, the discussion turns to explanations of the conclusions.

#### **6.2.4 Explanations for the conclusions**

Conclusions regarding relationships between all *demographic*, *psychographic* and *normative influencing variables* and **purchase intentions** were made in previous sections. As summarized in Table 6.1 and discussed in previous sections, **demographic variables** are unlikely to have a significant relationship with **psychographic** and **normative influencing variables** in this research. These results seem to be inconsistent with the findings of previous research (for example Ailawadi et al. 2001; Mittal 1994).

In terms of the findings regarding the relationship between *demographics* and **purchase intentions**, this research indicates that *demographic variables* are not a key influential factor in the purchase of the seasonally discounted Reebok athletic footwear as all of the investigated *demographic variables* did not significantly explain variance in **purchase intentions**. Although this finding differs from those of previous studies where *demographics* was noted to be an influential factor (but less important than

*psychographics*) that could have an effect on purchase behaviors (for instance Ailawadi et al. 2001; Mittal 1994), it is supported by a recent study indicating no significant effect of *demographics* on **purchase intentions** towards clothing products promoted through coupon promotions (Cho & Kang 1998). These mixed results may be due to the difference in the product context investigated by these studies. That is, this research and a study by Cho & Kang (1998) focused on non-grocery products (athletic footwear and clothes respectively) whilst other previous research (Ailawadi et al. 2001; Mittal 1994) concentrated on grocery products. This issue of product context is examined and its effect on findings of the research studies will be further discussed later in this section.

In relation to the findings regarding the influence of *psychographic* and *normative influencing variables* on **purchase intentions**, specific *psychographic* and *normative influencing variables* (**deal proneness, value consciousness, price consciousness, ‘attitudes of reference groups’, and quality consciousness**) are considered to be more influential than *demographics* in explaining **purchase intentions** as they have a significant and stronger effect on this dependent variable. These findings appear to support the literature. In addition, other *psychographic* and *normative influencing variables*, that were proposed to be influential factors by either previous studies or the exploratory research, are not found to have a significant relationship with **purchase intentions** in this research. These insignificant variables include **need for cognition, market (price) mavenism, loyalty to other athletic footwear brands, variety seeking, innovativeness, and ‘motivation to conform’**. These findings seem to be plausible because consumers tend to use utilitarian (savings and convenience) and value expressive benefits (rather than hedonic benefits) to evaluate, and in turn to respond to monetary promotions (Chandon et al. 2000). Therefore, in this research, only the *psychographic* and *normative influencing characteristics* relating to savings and convenience benefits are found to be significantly related with consumer intentions to purchase Reebok athletic footwear that was promoted through a seasonally price-discounting program.

Overall, the findings of this research tend not to support that of previous research. This inconsistency may be due to the following reasons. Firstly, some hypotheses were developed based on only the findings of exploratory research. For instance, hypotheses 1B and 1C that stated the relationship between **family size, marital status and price**

**consciousness**. These two *demographic variables* were not found to have an effect on **price consciousness** in previous studies. They were suggested by the exploratory research to be a key influential factor that could influence **price consciousness**. However, due to the qualitative nature of this exploratory research, the relationship between these two *demographics* and **price consciousness** was suggested without a statistical test. Thus, it is possible that these two *demographic variables* may not actually be related to **price consciousness** in the first place. When being statistically analyzed, **family size** and **marital status** were not found to be significantly associated with **price consciousness** in this research.

Secondly, in terms of the product and sales promotion examined, most of the previous studies (such as Bawa & Shoemaker 1987; Lichtenstein & Ridgway 1993; Mittal 1994; Narasimhan 1984a) had limited their research to frequently purchased products, specifically grocery products that were promoted through coupon redemptions (such as Ailawadi et al. 2001; Lichtenstein & Burton 1997; McCann 1974; Mittal 1994). On the other hand, this research was undertaken in a different context, specifically with a non-grocery product (athletic footwear) that was promoted through seasonal price-discounting programs. Consumers may react dissimilarly to different products (Chandon et al. 2000), and they may also respond differently to various types of sales promotional programs (Schultz et al. 1998). As a result, consumer characteristics that were indicated to be significantly related with consumer responses to grocery products promoted through other sales promotions may not be perfectly used to explain how consumers respond to non-grocery products (specifically athletic footwear) that are promoted through seasonal price-discounting programs. In addition, this research took a more narrow focus in its scope considering only the purchase at the brand level (Reebok athletic footwear), not the product category level, which was generally the case in previous studies. This focus may also contribute to the difference in the findings of this research and the literature because consumers respond dissimilarly to different brands (Chandon et al. 2000).

Thirdly, in terms of the region in which the previous studies were conducted, most of previous studies were undertaken in Western countries attempting to investigate Western consumers and their responses to products promoted through sales promotions. However, research models developed in Western regions might not be completely used

to depict consumer behavior in non-Western societies (Huff & Alden 1998), specifically in Thailand because consumers living in different societies may respond differently to a specific marketing program (Peter & Olson 2002). This region issue could be a key factor that makes the findings of this research different from other previous studies’.

Next, in respect to the issue of this research period, this research was undertaken in Thailand during the economic fluctuation period when consumers might be much more interested in promotional programs than usual. The economic crisis might influence consumers to develop certain characteristics favorable to a purchase of products promoted through sales promotions. For example, they might become more deal prone, price conscious, or value conscious than they were in the past. These characteristics might in turn become important in affecting consumer responses to products promoted through sales promotions. Simultaneously, other characteristics found to be influential in previous studies might become less influential or insignificant due to the stronger impact of the above characteristics on those consumer responses.

Finally, the results of this research may also differ due to the use of a different sampling technique. This research was conducted using a probability sampling technique, specifically the simple random method. On the other hand, most of the previous studies conducted their research using a non-probability sampling technique, for example quota sampling (Huff & Alden 1998), judgment sampling (Blattberg et al. 1978; McCann 1974; Narasimhan 1984a), and convenience sampling (Ailawadi et al. 2001; Cho & Kang 1998; Mittal 1994). By using non-probability sampling techniques, these previous studies may be unlikely to generalize their findings to the contexts researched in this study (Zikmund 1997).

In summary, this section concluded and compared findings of this research to previous studies’. In general, the results of this study tended not to confirm those of previous studies. Possible explanations for the difference in the findings of this research and the literature were also given. Next, the discussion turns to conclusions regarding the research problem and research objectives.

### 6.3 Conclusions in relation to the research problem and research objectives

The research problem developed in this thesis was: “*How do consumer characteristics influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market?*” The findings of this research provide an answer to this problem by addressing the specific research objectives:

- To identify key consumer characteristics that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear; and
- To determine how these factors have an impact on consumer intentions to purchase the seasonally discounted Reebok athletic footwear.

In relation to the first objective of this research, the literature of chapter 2 indicated a number of possible consumer *demographic, psychographic* and *normative influencing characteristics* that could influence **purchase intentions**. Possible *demographics* include **income, family size, gender, education, age, and employment status**. *Psychographic* and *normative influencing characteristics* are **price consciousness, deal proneness, need for cognition, market (price) mavenism, quality consciousness, value consciousness, loyalty to other athletic footwear brands, variety seeking, innovativeness, ‘attitudes of reference groups’, and ‘motivation to conform’**.

The exploratory research suggested additional influential characteristics, particularly **marital status, managerial position, and innovativeness**. All of these characteristics were investigated to determine whether they were influential in explaining consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market in this research.

The findings of this research discussed in section 6.2.3 have satisfied the first objective by suggesting five key *psychographic* and *normative influencing variables* found to have a significant influence on **purchase intentions** in the research context of Thailand. These influential variables are **deal proneness, value consciousness, price consciousness, ‘attitudes of reference groups’, and quality consciousness**. Other investigated *demographic* and *psychographic variables* were not found to be significant, and therefore are not considered key influential characteristics.

With respect to the second objective of this research, the determination of how these consumer characteristics have an impact on consumer intentions in purchasing the seasonally discounted Reebok athletic footwear, three specific issues have been covered. Firstly, the influence of *demographics* on *psychographics* and *normative influencing characteristics*, secondly, the level of importance of influential characteristics that could affect **purchase intentions**, and thirdly, the direction of the relationship between consumers' influential characteristics and **purchase intentions**. The findings of this research discussed in sections 6.2.1, 6.2.2, and 6.2.3 have satisfied this second objective of this research.

In terms of the influence of *demographics* on *psychographics* and *normative influencing characteristics*, Propositions stating the effect of *demographics* on *psychographics* and *normative influencing variables* were proposed in chapters 2 and 3, based on the literature and findings of the exploratory research and they were tested in chapter 5. As shown in Table 6.1, only 4 out of 15 relevant hypotheses were found to be supported. Particularly, **income** has been seen to have a negative but weak influence **price consciousness** (hypothesis 1A). **Age** (hypothesis 6) and **education** (hypothesis 9A) have been indicated to have a positive (but weak) relationship with **market (price) mavenism** and **innovativeness**, respectively. **Employment status** has been shown to have a weak influence on 'motivation to conform' (hypothesis 10A). Due to these weak relationships, *demographic characteristics* are generally not considered a key factor having a significant effect on *psychographics* and *normative influencing characteristics* in this research.

In terms of the level of importance of influential characteristics that could have an effect on **purchase intentions**, and the direction of the relationship between consumers' influential characteristics and **purchase intentions**, it was found in this research that *demographic characteristics* played less important role than *psychographic* and *normative influencing characteristics* in explaining consumer intentions to purchase the seasonally discounted Reebok footwear. This supports the findings of previous research (Ailawadi et al. 2001; Mittal 1994). More importantly, *demographics* are not considered a key factor influencing **purchase intentions** in this research.

Conversely, specific *psychographic* and *normative influencing characteristics* were identified to be influential factors. Specifically, **deal proneness** were considered the most important characteristic that has a positive influence on **purchase intentions**, and was followed by **value consciousness**, **price consciousness**, and ‘**attitudes of reference groups**’ respectively. **Quality consciousness** was deemed to be the least influential factor and it had a negative effect on this dependent variable. Nonetheless, other *psychographic* and *normative influencing characteristics* including **innovativeness**, **need for cognition**, **market (price) mavenism**, **loyalty to other athletic footwear brands**, **variety seeking**, and ‘**motivation to conform**’ were not identified to have a relationship with **purchase intentions** in this research.

In summary, the findings of this research have satisfied the research problem proposed by firstly identifying key consumer characteristics that could have an impact on consumer intentions to purchase the seasonally discounted Reebok athletic footwear, and secondly, determining how these characteristics influence **purchase intentions**. In general, *demographics* tended not to have a relationship with *psychographics* and *normative influencing characteristics*. In addition, none of the *demographics* were considered to influence **purchase intentions**.

Further, *psychographic* and *normative influencing characteristics* were shown to have a significant relationship with **purchase intentions**. Listing from the most to the least influential, the five consumer characteristics identified in this research that will have an effect on **purchase intentions** were **deal proneness**; **value consciousness**; **price consciousness**; ‘**attitudes of reference groups**’; and **quality consciousness**. All of these characteristics, excluding **quality consciousness**, have a positive influence on **purchase intentions**. **Quality consciousness** was the only key *psychographic characteristic* that had a negative impact on **purchase intentions**. It can therefore be concluded that *psychographics* and *normative influencing characteristics* are much more influential than *demographics* in explaining the variance in **purchase intentions** for the seasonally discounted Reebok athletic footwear. Next, the discussion turns to the implications of these research results.

## 6.4 Implications of the research findings

The research findings discussed in previous sections have implications for theory (section 6.4.1) and practices (section 6.4.2). These implications are now discussed.

### 6.4.1 Theoretical implications

This section discusses the implications in a theoretical context. The implications are described in relation to key gaps justified in previous chapters (chapters 2, 3, and 4).

These gaps include:

- A lack of studies incorporating all relevant factors relating to both the utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) in previous research;
- Limited research investigating the relationship between antecedent consumer characteristics;
- Research conducted in limited contexts; and
- A lack of research studies using a probability sampling technique.

Contributions of this research to these gaps are now addressed commencing with the implication regarding an investigation of all factors relating to both utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975).

**Inclusion of all possible factors relating to both the utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) in this study.** This research is the first study of the factors influencing consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai context, which reinforces the use of both utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) to develop a research framework depicting consumer characteristics and their influence on **purchase intentions**. Utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) enable the researcher to provide an explanation for the relationship between consumer characteristics relating to *demographics, psychographics, reference groups* and the consumer response variables. However, there is a general lack of research that includes all of these relevant consumer characteristics at a time. To fill this gap, this research has explored a number of possible influential factors from the review of literature and the exploratory research. As a result,



a more comprehensive set of all possible consumer characteristics (eight *demographics*, eleven *psychographic* and *normative influencing characteristics*) expected to be key factors that could influence consumer responses to discounting promotions has been incorporated in this research. This in turn enables the researcher to develop a more complete understanding of how consumer characteristics in relation to utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) affect consumer responses to discounting programs.

In terms of the *response variable*, the theory of reasoned action (Fishbein & Ajzen 1975) suggests the researcher measures behavioral intentions, rather than actual behaviors, as the key response construct being directly influenced by perceptions and attitudes of consumers and reference groups. This theory explains that measuring the effect of consumers' attitudes and perceptions on actual behaviors may result in achieving biased research findings due to some other situational factors that researchers do not investigate, such as product unavailability (Blattberg & Neslin 1990; Hoyer & MacInnis 1997). In addition, behavioral intention is the single best predictor of actual behavior (Peter & Olson 2002). However, limited research has been conducted investigating the influence of consumer characteristics on this behavioral intention (Cho & Kang 1998). This research has followed this suggestion and then used behavioral intention (specifically **purchase intentions**) as the only key response variable that was determined to be influenced by all investigated consumer characteristics.

Notably, the findings of this research support these two theories identifying five *psychographic* and *normative influencing characteristics* as the key factors that influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear. These five factors include **deal proneness, value consciousness, price consciousness, quality consciousness, and attitudes of reference groups towards a purchase of the seasonally discounted Reebok athletic footwear**. These support the findings of previous studies (Ailawadi et al. 2001; Mittal 1994) in the way that *psychographic* and *normative influencing characteristics* play more important role than *demographic characteristics* in explaining how consumers respond to products promoted through sales promotions. However, none of the *demographic characteristics* are identified to be influential factors in this research and this is supported by a recent

study undertaken with clothing products promoted through coupon redemptions (Cho & Kang 1998).

**Limited research investigating the relationship between antecedent consumer characteristics.** A major gap in the existing body of knowledge regarding the influence of consumer characteristics on consumer responses to products promoted through sales promotions was that of the limited investigation of the relationship between antecedent characteristics. To gain a more complete understanding of how consumers respond to sales promotions, a researcher should not only identify influential factors, but also investigate the intervening mechanisms between the influential factors (Mittal 1994). The relationship between influential variables could affect how these variables effect **purchase intentions** by diminishing any single antecedent variables' predictive power by the extent to which it is correlated with the other antecedent variables (Hair et al. 1998). However, none of early studies (except Ailawadi et al. 2001; Mittal 1994) have focused their investigations on the intervening mechanism issue.

This research fills this gap by investigating the correlation between antecedent consumer characteristics, namely: *demographics*; *psychographics*; and *normative influencing factors*, in addition to the influence of these factors on the dependent variable of **purchase intentions**. *Demographics* were shown not to have a significant influence on *psychographic* and *normative influencing characteristics* in this context. These findings have confirmed the discussion in the previous section identifying *demographic characteristics* as not important in the prediction of purchase intentions for the seasonally discounted Reebok athletic footwear, since these factors could typically explain very small variance in both *psychographic* and *normative influencing characteristics* and **purchase intentions**. The findings of this research provide a contribution to the body of knowledge in relation to this research topic by suggesting that *demographics* are not in themselves influential in the prediction of **purchase intentions** and possibly should be excluded from a research model that will be developed to depict the influence of consumer characteristics on consumer responses to sales promotions in order to make the research model parsimonious. *Demographic characteristics* may be used only for the purpose of consumer identification.

**Research conducted in limited contexts.** The third implication relates to the research context investigated. Previous studies (such as Bawa & Shoemaker 1987; Lichtenstein & Ridgway 1993; Mittal 1994; Narasimhan 1984a) have tended to limited their research to Western regions, to coupon redemption behaviors, or to grocery products (such as Ailawadi et al. 2001; Lichtenstein & Burton 1997; McCann 1974; Mittal 1994). To extend the body of knowledge of the sales promotion literature, this research was taken place to investigate consumer responses to a non-grocery product (athletic footwear) that has been promoted through other sales promotions (seasonally price-discounting programs) in a nonwestern country (specifically Thailand).

**A lack of research studies using a probability sampling technique.** Most studies in this area conducted their research using a non-probability sampling technique, for example, quota sampling (Huff & Alden 1998), judgment sampling (Blattberg et al. 1978; McCann 1974; Narasimhan 1984a), and convenience sampling (Ailawadi et al. 2001; Cho & Kang 1998; Mittal 1994). Non-probability sampling techniques have resulted in research findings being limited to just samples investigated in the surveys (Zikmund 1997). Therefore, findings of previous studies may have a limitation in terms of generalizability of the results to other research contexts.

This research has attempted to reduce this limitation by employing a probability sampling technique, namely: simple random sampling, because using this sampling technique helps the researcher to gain reliable and valid results (Hair, Bush & Ortinau 2000), and then to be able to generalize research findings to the defined target population (Zikmund 1997). However, finally in this research, samples generated from the use of this sampling technique were not perfectly representative of the 2002 Super Sports sampling frame as previously discussed in section 5.2.2. This limitation in terms of the sample representativeness will be more detailed in section 6.5.

In brief, this research provides theoretical contributions to the body of knowledge of the influence of consumer characteristics on consumer responses to sales promotions in several ways. Firstly, all possible characteristics in relation to utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) were investigated simultaneously to determine the influence of these factors on a dependent variable of behavioral intention (specifically consumer intentions to purchase the seasonally

discounted Reebok athletic footwear). Secondly, not only identifying influential characteristics, this research also examined the relationship between antecedent influential characteristics as these relationships may have an effect on how these factors influence **purchase intentions**. Thirdly, this research was conducted in the context of athletic footwear that was promoted through seasonal discounting programs in Thailand and this research context has never been explored by previous studies. And lastly, this research used a probability sampling technique (simple random sampling method) to select samples for this investigation in order to gain more valid research results (Hair et al. 1998) than previous studies, which used non-probability sampling techniques. Next, the discussion moves to practical implications.

#### **6.4.2 Practical implications**

In addition to the theoretical implications discussed above, this research has implications for management practices. Key practical implications of this research cover the topics of companies' ability to develop more effective price discounting programs, selection of products to be promoted in the discounting programs, and consumer awareness of discounting promotions. These issues are discussed in turn.

**Companies' ability to develop more effective price discounting programs.** The first issue of practical implications is regarding the Reebok athletic footwear companies' and Reebok retailers' ability to develop a more effective price discounting programs. To be successful in implementing a sales promotional program, Reebok companies and Reebok retailers should be able to identify their target consumers and in turn, to develop appropriate sales promotional programs to persuade those consumers to purchase Reebok athletic footwear. This can be done by performing an analysis of consumer characteristics and the influence these factors have on consumer responses to sales promotions (Wakefield & Bush 1998; Schultz et al. 1998). This information should be developed at both the product category and the individual brand levels (Schultz et al. 1998) as consumers respond differently not only to different brands (Chandon et al. 2000), but also to different product categories promoted through various sales promotions (Ailawadi et al. 2001).

This research has provided information specifically about consumer characteristics that could influence consumer intentions to purchase Reebok athletic footwear promoted

through a seasonally price-discounting program in the Thai market. Four *psychographics* identified to be influential in explaining **purchase intentions** include **deal proneness, value consciousness, price consciousness, and quality consciousness**. These findings will enable Reebok (Thailand) and retailers of Reebok in Thailand to understand how consumers respond in a specific direction to the seasonally discounted Reebok athletic footwear based on these characteristics. Additional research can be done to identify consumers who have these characteristics. This knowledge is in turn expected to enable these Reebok (Thailand) and retailers to develop price-discounting programs more effectively, and to target consumers who are deal prone, value conscious, and price conscious since these people tend to react most favorably to Reebok's discounting promotions. Quality conscious consumers tend not to purchase discounted Reebok athletic footwear based on the findings of this research. However, the discounting programs can also target these consumers if Reebok (Thailand) and Reebok retailers can make them aware about the quality of the discounted footwear. The issue of product quality will further be justified later under the topic of product selection for discounting programs.

In addition to the above influential *psychographics* that will be used for target segmentation, this research also indicates **attitudes of reference groups towards a purchase of the seasonally discounted Reebok athletic footwear** to be a key **normative influencing factor** that could influence how consumers respond to the seasonally discounted Reebok athletic footwear. Consumers intend to purchase the seasonally discounted Reebok athletic footwear if their reference groups have a positive feeling towards a purchase of this discounted product. The findings regarding the variable of '**attitudes of reference groups**' suggests that Reebok (Thailand) and Reebok retailers may conduct additional research in order to identify reference groups of their consumers. These companies in turn can develop additional marketing programs targeted to these reference groups with an attempt to motivate them to build a positive feeling towards Reebok brand and their discounting campaigns. As a result, Reebok (Thailand) and retailers should focus on both consumers and their reference groups when developing price discounting programs.

Findings of this research also provide a primary suggestion to Reebok (Thailand) and Reebok retailers in that companies may avoid direct competition with other athletic

footwear brands or other athletic footwear retailers that implement different promotional campaigns because a specific promotional campaign may be suitable for specific groups of consumers (Ailawadi et al. 2001). Therefore, Reebok (Thailand) and Reebok retailers may be able to avoid strong competitions with other companies by implementing discounting programs and targeting consumers with the above characteristics during the time that the others are using different sales promotional campaigns. However, further research needs to be taken to determine if this suggestion is true in this research context of Thailand.

**Selection of products for discounting programs.** The second practical implication of the findings of this research is regarding the selection of product (athletic footwear models) for discounting programs. As discussed in the previous section, consumers who may respond favorably to the seasonally discounted Reebok athletic footwear include those who are deal prone, value conscious, and price conscious. However, those who are quality conscious tend not to behave accordingly. These findings generally suggest that these consumers are concerned more with quality or functional benefits they can get from a purchase of athletic footwear than with the low price of the discounted products. To persuade these consumers to purchase the seasonally discounted Reebok athletic footwear, Reebok (Thailand) and Reebok retailers may include high priced athletic footwear with quality or multi-features into promotional programs in order to show these consumers (specifically quality conscious consumers) that the seasonally discounted Reebok athletic footwear are quality products and consumers can purchase them with a lower price.

**Consumer awareness of sales promotions.** The findings of this research identified **deal proneness** to be the most influential consumer characteristic that positively impacted **purchase intentions**. A possible explanation for these findings is that price-discounting programs in the form of purchase offer positively affects purchase evaluations (Thaler 1983). Deal prone consumers may define value in terms of the existence of sales promotions and think of this discounting promotion as an indicator of good deals without actually comparing a reduced price of the discounted brand with that of other brands (Zeithaml 1988).

In this case, Reebok (Thailand) and Reebok retailers shall help deal prone consumers to minimize their decision costs by providing them with an easier decision heuristic for a purchase of athletic footwear (Ailawadi et al. 2001; Wansink et al. 1998). Media plans should be developed in order to promote promotional campaigns and to create the exposure of the promotional events. Promotional plans and strategies in relation to advertisements, promotional signs, product displays, and well-trained personal counselors should be developed and implemented. These strategies should make sure that the promotional campaigns of Reebok athletic footwear are effectively exposed to deal prone consumers and in turn will persuade these consumers to take advantage of the temporary incentive of these Reebok promotions (Wakefield & Barnes 1996) and finally to purchase the seasonally discounted Reebok athletic footwear.

In summary, the findings of this research have contributed to the study of the influence of consumer characteristics on consumer responses to products promoted through sales promotions theoretically and practically. Theoretically, this research has reinforced the use of utility theory (Thaler 1985) and the theory of reasoned action (Fishbein & Ajzen 1975) to identify influential consumer characteristics and to explain how these factors influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. This research context has never been explored by previous studies. This research has also investigated the association between the antecedent characteristic variables and found no significant relationship between these variables.

Practically, Reebok (Thailand) and other Reebok retailers can use the findings of this research to understand how specific consumer characteristics (**deal proneness, value consciousness, price consciousness, quality consciousness, and ‘attitudes of reference groups’**) influenced consumer intentions to purchase the seasonally discounted Reebok athletic footwear. Reebok (Thailand) and Reebok retailers can conduct additional research to identify consumers who have these characteristics. This extended knowledge enables Reebok (Thailand) and Reebok retailers to target their discounting programs more effectively. This research also provides to these companies suggestions regarding product selection and media planning for persuading target consumers to purchase the seasonally discounted Reebok athletic footwear. The discussion now moves to limitations of this study.

## 6.5 Limitations of this research

This research has attempted to provide both valid and reliable explanations of how consumer responses to the seasonally discounted Reebok athletic footwear in the Thai market by incorporating all possible relevant consumer characteristics and investigating the influence of these factors on the dependent variable of **purchase intentions**. However, some limitations of the study and its results do exist.

Firstly, most of the consumer characteristics included in this research and measurements of these characteristics were selected and developed respectively from the findings of the previous studies investigating consumer responses to grocery products promoted through other sales promotions, particularly coupon promotions, and of the exploratory research. As discussed in section 2.3, there are a number of consumer characteristics and sub-factors of these characteristics that may also influence consumer behavior (Mowen & Minor 1998). There may be other factors that are also relevant to this research context but have not yet been investigated by previous research and not included in this study. An exclusion of these possible factors may reduce the accuracy of the findings of this research. These other factors may include, for instance, consumer involvement with athletic activity, and media exposure. Future research may also focus on these possible factors and examine if they are influential in explaining the response variables. Future research will be further discussed in section 6.6.

Secondly, in terms of the generalizability of the research findings, this research specified the discounting rate of Reebok athletic footwear as 30% off, the discounting rate most frequently used by Reebok. This fixed discounting rate might have imposed a limitation on understanding the more (or less) intricate nature of consumer responses to the seasonally discounted Reebok athletic footwear, which may differ according to the different rate (% off) of discounting programs offered to consumers.

In respect to the issue of sample representativeness, samples used in this study were generated from the database of the largest athletic footwear retailers in Thailand (Super Sports) using the simple random sampling technique. However, as previously discussed in section 5.2.2, samples were not perfectly statistically representative of the Super Sports database. In addition, how well these samples represent the population cannot be assessed at this stage due to the lack of information regarding consumer characteristics



of all athletic footwear consumers in the Thai market. Hence, results of this research may be confined only to this group of samples rather than to the rest of all athletic footwear consumers in Thailand or athletic footwear consumers in other countries. The issue of representativeness of these samples may result in some limitations in terms of the generalizability of the findings of this research.

Further, this research has taken place during the economic fluctuation period. In this period of time, consumers may respond more favorably to the seasonally discounted Reebok athletic footwear than usual. As a result, the findings of this research may not be perfectly used to explain how consumers respond to the seasonally discounted Reebok athletic footwear in other economic periods.

Next, in terms of quality of the measurements, some items were found to be unreliable and/or multi-dimensional measures. However, these items were still used in the analysis due to the fact that item eliminations could not be completely performed as few items were left to represent the relevant construct. In addition, eliminating these poor items helped to gain only marginal improvement in the statistical validity and reliability of the measures. These poor items include item 3.29 for **quality consciousness**, item 3.12 for **value consciousness**, items 3.16, 3.32 and 3.42 for **loyalty to other athletic footwear brands**, items 3.17 and 3.28 for **attitudes of reference groups to the seasonally discounted Reebok athletic footwear**. The use of unreliable and / or multi-dimensional items could distort the research findings in relation to the above variables (Cooper & Schindler 2001).

Lastly, the data used in the analysis in this research are correlational and analyzed using multiple regression methods. However, regression methods have limitations. This analysis technique can not be used to estimate a number of relationships between independent and dependent variables at one time, and this in turn tends not to allow the researcher to depict complex relationships between these variables simultaneously (Hair et al. 2001). In terms of the causal explanation of the relationship between antecedent and dependent variables, cause-effect relationships between antecedent **demographic**, **psychographic**, and **normative influencing characteristics** and the dependent variable of **purchase intentions** discussed in this research have not been actually tested but assumed based on a priori logic.

The above limitations are not considered to seriously minimize value of the findings of this research program. These limitations provide implications for future research, which is discussed next.

## **6.6 Implications for future research**

The opportunities for future research extend from the limitations of this research and respond to possibilities in implementation. Future research may consider the following issues.

**Inclusion of other key antecedent factors.** This research is the first empirical study investigating the influence of consumer characteristics on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in Thailand. Key antecedent characteristics investigated in this research are internal characteristics of consumers: namely; *demographic*; *psychographic*; and *normative influencing characteristics*. A forward step in the future would be to include other possible antecedent variables relevant to consumer responses to Reebok athletic footwear promoted through seasonally price discounting programs into the research model. Potential antecedent factors may include other internal consumer *psychographics*, for instance consumer involvement with athletic activity. That is, consumers may participate in various kinds of athletic activities. The degree to which they perceive themselves as an amateur or professional athlete and a frequency of their participation in athletic activities may influence how they perceive the necessity of having other pairs of athletic footwear as a substitution. This perception may in turn influence their responses to the seasonally discounted Reebok athletic footwear. Other psychographic characteristics may include media exposure, health consciousness, perceived frequency of discounting programs of Reebok and other athletic footwear brands, shopping behaviors, and factors relevant to purchase decisions. An inclusion of additional antecedent factors will enable the researcher to provide a more complete picture of the influence these factors have on consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. This understanding may in turn help Reebok (Thailand) and retailers to develop their price discounting programs more appropriately.

**Generalizability of the findings of this research.** This research has tended to provide different results from that of previous research in some key areas, for instance the findings regarding the insignificant relationship between *demographic* and *psychographic* and *normative influencing variables*, and the results regarding the insignificant influence of *psychographic characteristics* relevant to non-monetary benefits (such as **innovativeness**, and **brand loyalty**) and **purchase intentions**. To determine whether the finding of this research can be generalized, additional research may be conducted to investigate if similar patterns can be repeated in other research contexts. For example, other researchers may conduct their studies with Reebok athletic footwear promoted through various rates of discounting programs, or use other databases consisting of nationwide athletic footwear consumers in the Thai market. Future research may also focus on other athletic footwear brands in Thailand, or Reebok in other Asian countries, or conduct an investigation in different economic situations. In addition, future studies may conduct their research in more than one population simultaneously in order to that a comparison of research results can be made more appropriately.

In terms of the sampling technique used in this research, as discussed previously in section 6.5, samples used in this research did not well represent the Super Sports sampling frame possibly due to the adoption of the simple random sampling technique and this nonrepresentativeness of samples has in turn resulted in the findings of this research unable to be generalized to other research contexts. Future studies may repeat this research project with the use of other probability sampling techniques, such as systematic sampling, in order to determine if the generalizability of the findings of this research can be improved.

**Use of scales with multi-items.** Future studies can refine the measurement scales used in this research by using multi-items (more than 4 items) for each construct. Thus, after removing unreliable or invalid items, there will be sufficient items remaining for completing an item remedy process.

**Use of a more complex statistical technique.** The final issue is regarding the statistical technique used for data analysis. Future research can use a more complex data analysis technique to examine the relationship between consumer characteristics and the

dependent variables of consumer responses to the seasonally discounted athletic footwear products. Specifically, structural equation models can be used to estimate multiple interrelated relationships between these variables simultaneously. Hence, complex relationships between these variables, specifically the inter-correlations between *demographic*, *psychographic* and *normative influencing characteristics* and the influence of these interrelations on the relationship between these variables and **purchase intentions**, can be modeled to develop a better understanding regarding this phenomenon (Hair et al. 1998). Moreover, future studies may also be conducted using experimental or explanatory research to examine causal relationships of these variables. Therefore, the direction of the relationship of these variables can be understood more appropriately.

## 6.7 Conclusions

This research has addressed the problem of how consumer characteristics influence consumer intentions to purchase the seasonally discounted Reebok athletic footwear in the Thai market. The objectives were to identify important consumer characteristics and to determine how these factors influence **purchase intentions**. Based on the extant literature and exploratory research, hypotheses depicting a relationship between these variables were developed and tested. Findings of this research indicated **deal proneness** to be the most important factor that had a positive influence on **purchase intentions** and it was followed by **value consciousness**, **price consciousness**, and **attitudes of reference groups towards the seasonally discounted Reebok athletic footwear**. **Quality consciousness** was found to be the least important factor having a negative influence on **purchase intentions**. On the other hand, none of *demographics* were found to have a significant relationship with this dependent variable. In addition, *demographics* were not shown to be related with most of the *psychographic* and *normative influencing variables*.

This research has contributed to the body of knowledge in the field of the influence of consumer characteristics on consumer responses to products promoted through sales promotions and raised implications for theory and practice. This research has discussed limitations of this study and has also highlighted opportunities for future research approaches.

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## Appendix 3.1

### Key interview Questions

1. Key sales promotions commonly used by major athletic footwear brands, and consumer perceptions of Reebok and its sales promotional programs
  - Could you please identify the key sales promotions commonly used by major athletic footwear brands in the Thai market?
  - What do you think about Reebok and its sales promotional programs?
2. Antecedent factors influencing consumer responses to the seasonally discounted Reebok athletic footwear
  - Could you please identify and justify which ones of the following factors potentially have an influence on consumer responses to the seasonally discounted Reebok athletic footwear?

Demographics: age, gender, income, employment, family size, presence of children, education, type of living place, location of living place, and other, if any, please identify.

Psychographics in relation to perceived utility: price consciousness, value consciousness, quality consciousness, market (price) mavenism, brand loyal, store loyalty, identification, variety seeking, time pressure, shopping plan, shopping enjoyment, impulsiveness, perceived inventory space, need for cognition, deal proneness, and other, if any, please identify.

Normative influencing factors: motivation to conform to the expectations of reference groups, attitudes of reference groups towards the seasonally discounted Reebok athletic footwear

- Do you think that there would be other factors that potentially influence consumer responses to the seasonally discounted Reebok athletic footwear?  
If so, please identify, and why?
3. Behavioral responses
    - In addition to consumers' actual purchase behaviors of the seasonally discounted Reebok athletic footwear, please identify any other key

behavioral responses, which you believe might be better indicators of consumer reaction to the seasonally discounted Reebok athletic footwear (from three alternative variables, namely: purchase intentions; attitudes to promoted products; and utility perceptions), if any, and why?

- Please prioritize the identified variables
4. The influences of the identified factors on consumer responses to the seasonally discounted Reebok athletic footwear
- From the two behavioral frameworks (see the Appendix 3.3), please identify which framework you believe better explains the influences of factors on consumer responses to the seasonally discounted Reebok athletic footwear and why?

## Appendix 3.2

### Definitions of variables used in the exploratory research

Variables	Conceptual Definitions	Sources
<b>Demographic factors</b>		
Gender	Gender of respondents	Adapted from Ailawadi et al. 2001
Age	Age of respondents	Adapted from Ailawadi et al. 2001
Education	Level of education of respondents	Adapted from Narasimhan 1984aa
Occupation	Employment status	Adapted from Cronovich et al. 1997; and Mittal 1994
Family size	Number of members in the respondent family	Adapted from Mowen & Minor 1998; and Narasimhan 1984aa
Presence of children	Have or do not have children	Adapted from Bawa & Shoemaker 1987a, Narasimhan 1984aa, and Cho & Kang 1998
Income	Monthly family income	Adapted from Ailawadi et al. 2001
Type of residence	Respondents currently live in home, apartment, townhouse, or other types of residence	Adapted from Ailawadi et al. 2001
Location of residence	Residence located in urban or rural area	Adapted from Bawa & Shoemaker 1987a
<b>Psychographic factors</b>		
Price consciousness	The degree to which consumers focus on paying low price and thus tend to purchase the lowest priced athletic footwear	Adapted from Lichtenstein &, Ridgway 1993
Value consciousness	The degree to which consumers trade off between the product's perceived quality relative to its perceived price	Adapted from Lichtenstein, Netemeyer & Burton 1990; and Lichtenstein & Ridgway 1993
Quality consciousness	The degree to which consumers use a price of athletic footwear as a key indicator of the product quality	Adapted from Lichtenstein, Bloch & Black 1988; and Lichtenstein & Ridgway 1993
Market (price) mavenism	The degree to which consumers become a source of information of discounting programs of athletic footwear products and can suggest others regarding places to purchase for the discounted products	Adapted from Lichtenstein & Ridgway 1993
Brand loyalty	The degree to which consumers commit to an athletic footwear brand and continue purchasing that brand without purchasing other brands	Adapted from Ailawadi et al. 2001; and McCann 1974
Store loyalty	The degree to which consumers commit to a particular athletic footwear outlet and continue purchasing athletic footwear from this outlet without buying these products from some other outlets	Adapted from Ailawadi et al. 2001; McCann 1974; and Mittal 1994

### Appendix 3.2- continued

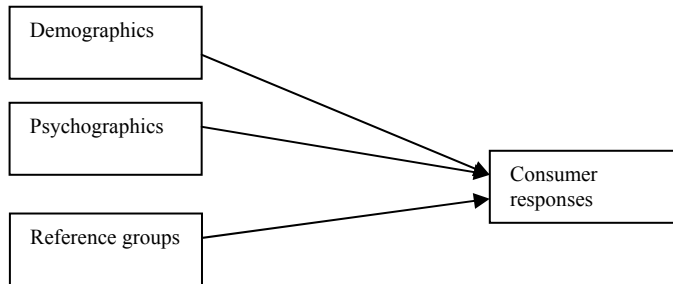
<b>Variables</b>	<b>Conceptual Definitions</b>	<b>Sources</b>
Identification	The degree to which consumers respond to events that occur to an organization or individuals within an organization as if the events have happened to them.	Adapted from Wakefield & Bush 1998
Variety seeking	The degree to which consumers switch to alternative athletic footwear brands for a change of pace and for reducing their boredom	Adapted from Ailawadi et al. 2001; and Steenkamp & Baumgartner 1992
Time pressure	The degree to which consumers are busy	Adapted from Mittal 1994
Shopping plan	The degree to which consumers spend their time in planning their shopping trips and make a shopping list prior to an actual purchase of the discounted athletic footwear	Adapted from Ailawadi et al. 2001
Shopping enjoyment	The degree to which consumers enjoy shopping for discounted athletic footwear	Adapted from Ailawadi et al. 2001
Impulsiveness	The degree to which consumers buy athletic footwear on impulse in the athletic footwear outlet	Adapted from Ailawadi et al. 2001
Need for cognition	The degree to which consumers are pleased to put their effort on thinking, deliberating, and contemplating of athletic footwear products and relevant information prior to an actual purchase	Adapted from Ailawadi et al. 2001; and Hoyer & MacInnis 1997
Deal proneness	The degree to which consumers increase their propensity to the discounted athletic footwear because a deal in the form of a purchase offer positively effects purchase evaluations	Adapted from Cho & kang 1998; and Thaler 1983
Perceived inventory space	The degree to which consumers perceive the constraints of storage space	Adapted from Ailawadi et al. 2001; and Blattberg et al. 1978
<b>Normative influencing factors</b>		
Motivation to conform to the expectations of reference groups	The degree to which consumers care about the expectations of their reference groups	Adapted from Ailawadi et al. 2001
Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear	Consumer perceptions of attitudes of reference groups towards a purchase of the seasonally discounted Reebok athletic footwear	Adapted from Huff & Alden 1998
<b>Response variables</b>		
Attitudes towards sales promotions	Consumers' feeling towards a purchase of the seasonally discounted Reebok athletic footwear.	Adapted from Mittal 1994
Utility perceptions	Consumers' perceived costs and benefits from a purchase of the seasonally discounted Reebok athletic footwear.	Adapted from Ailawadi et al. 2001; Chandon et al. 2000; Mittal 1994; and Thaler 1985
Purchase intentions	The degree to which consumers are willing to purchase the seasonally discounted Reebok athletic footwear.	Adapted from Cho & Kang 1998; and Mowen & Minor 1998

Source: developed for this thesis from the authors cited

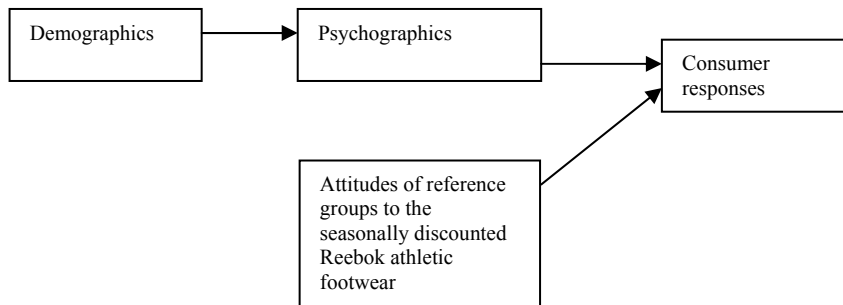
### Appendix 3.3

#### Behavioral frameworks of the influences of factors on consumer responses to the seasonally discounted Reebok athletic footwear

##### Framework #1



##### Framework #2



## Appendix 4.1

### Cover letter to prospective respondents for mail survey research

The following cover letter will be sent with questionnaire and a reply paid envelope to respondents randomly selected from the member list of Super Sports for the first mailing.

The researcher's name  
The researcher's address

(Date)

(Respondent's name and address)

Dear (Respondent name)

I am a Doctoral student at the University of Southern Queensland, in Australia. I am conducting survey research on consumer responses to athletic footwear products promoted through seasonal discounting programs this month (December 2002) and would like to include your opinions.

The purpose of this research is to find out opinions of your and other consumers about factors that influence consumer purchase intention of the 30 % seasonally discounted Reebok athletic footwear. Your answers to this questionnaire are very important because they will be enhanced with others' to produce aggregate research findings, which will then be submitted as a part of my thesis for completing the Doctoral program of the University of Southern Queensland. In addition, research findings will enable athletic footwear brands and retailers to be aware of factors that should be taken into account for developing a specific promotional strategy that athletic footwear consumers may want.

The information obtained from this survey will not reflect the identities of the people participating. *Your cooperation, attitudes and opinions will be kept strictly confidential.*

Your name is one of only 1,600 names randomly selected from a representative list of consumers who purchased athletic footwear from retailers in leading department stores. Because the success of this survey depends on the cooperation of all the people who are selected and their honest responses, I would especially appreciate your willingness to help me.

Past research has suggested that many mailed questionnaires, if not completed and returned within the first 3 days, have a tendency to be forgotten. Upon receiving this survey, please take the time to complete it immediately. It will take only about 10 minutes of your time to answer each of the simple questions in the enclosed questionnaire. You can easily answer the questions by following the instructions provided.

To show my appreciation for your taking the time to participate in this important survey, I am going to send a pair of athletic socks for free to the first 400 among those of you who complete and return questionnaire by 31/12/02.



After completing all the questions, please use the stamped reply envelope to return your complete survey. Once again, your true opinions are very important to this research study. If you wish to receive a report on research findings, please tick the box on the back page of the questionnaire.

I will be very pleased to answer any questions you may have. Please write or call. The telephone is 02468-5270.

Thank you in advance for your assistance.

Sincerely,

Atasit Lorterapong  
Doctoral student  
DBA program, University of Southern Queensland

## **Appendix 4.1.1**

### **The first follow-up letter**

The following letter will be sent to all prospective respondents ten days after the initial mailing to thank respondents who have already completed and returned questionnaires. Simultaneously, this letter aims to remind those who have not yet responded.

The researcher's name  
The researcher's address

(Date)

(Respondent's name and address)

Dear (Respondent name)

Ten days ago, a questionnaire soliciting your reply about consumer responses to the seasonally discounted Reebok athletic footwear products was mailed to you. If you have already completed and returned it, please kindly accept my sincere thanks. If not, please kindly do it as soon as possible. Your cooperation will be much appreciated. It is very important that your information is included in my study to achieve accurate and reliable overall research findings.

Please be reminded that you will receive a free pair of athletic socks if you are among the first 400 respondents who complete and return questionnaire within 31/12/02.

Kindly contact me on 02468-5270 for any questions you may have.

Yours sincerely

Atasit Lorterapong  
Doctoral student  
DBA program, University of Southern Queensland

**Appendix 4.1.2**  
**The second follow-up letter**

The following letter with a questionnaire will be resent to all remaining non-respondents twenty days after the initial mailing to thank those who already returned the questionnaire, and remind those who have not yet responded.

The researcher's name  
The researcher's address

(Date)

(Respondent's name and address)

Dear (Respondent name)

Three weeks ago I mailed you a questionnaire asking for your input about consumer responses to the seasonally discounted Reebok athletic footwear. However, up to date, I have not received your returned questionnaire. If you have already completed and returned it, please disregard this letter. If not, please do so today because your reply is significantly important. The success of this research study is very much dependent on the returned questionnaires. Your questionnaire is thus very meaningful to this study.

In case your questionnaire has been misplaced, please use the enclosed questionnaire. I look forward to your reply. I hope that you are among the first 400 respondents who return questionnaires not later than 31/12/02, who will receive a free pair of athletic socks.

Kindly contact me on 02468-5270 regarding any questions that you may have about this research study.

Your contribution is much appreciated.

Yours sincerely

Atasit Lorterapong  
Doctoral student  
DBA program, University of Southern Queensland

**Appendix 4.2**  
**Questionnaire used in this survey research**

**‘Factors influencing consumer intentions to purchase the seasonally discounted Reebok athletic footwear’**



**Free: A pair of Soft Liner athletic socks is given to the first 400 respondents who complete and return this questionnaire within 31/12/02.**

This survey is conducted for educational purposes. Findings from this survey will be submitted as a part of the researcher’s doctoral thesis at the University of Southern Queensland, Australia. Your honest responses are very important to the success of this survey and will be kept confidential.

I very much appreciate your cooperation, and am offering to send a pair of Soft Liner athletic socks for free to the first 400 respondents who complete and return this questionnaire by 31/12/02.

Please complete the following questions and use the enclosed prepaid envelope to return this completed questionnaire to the researcher. If you wish to comment on this survey study, please use the space provided on the back cover.

**PART 1: SPORTS ACTIVITIES**

*Please tick (X) on the box most relevant to your answers*

1.1. Which of the following sport activities do you play most? *(Please tick only one box)*

- Golf
- Soccer
- Volley Ball
- Tennis
- Table Tennis
- Jogging/Running
- Basketball
- Badminton
- Swimming
- Cycling
- Aerobic/Fitness
- Other (please specify) \_\_\_\_\_

1.2. Within the past 6 months, how often do you play sport identified in 1.1? *(Please tick one box)*

- Never
- One or two times a month
- One or two times a week
- More than two times a week
- Other (please specify) \_\_\_\_\_

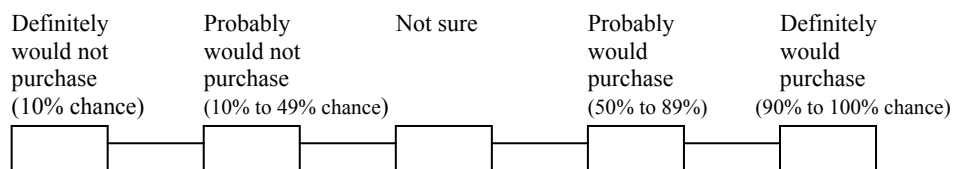
1.3. Currently, do you have athletic footwear? *(Please tick one box)*

- Yes, I currently have \_\_ pair(s).
- No

**PART 2: YOUR PURCHASE INTENTION TOWARDS THE 30% SEASONALLY DISCOUNTED REEBOK ATHLETIC FOOTWEAR**

*For the following statement, please rate your purchase intention of the 30% seasonally discounted Reebok athletic footwear by ticking (X) the appropriate box using the following scale.*

2.1. When shopping for athletic footwear, how likely is it that I would buy Reebok athletic footwear that were 30% seasonally discounted? *(Please tick only one box)*



Thanks for your help so far. Now I need some personal information about your purchase of athletic footwear products. Your answers to following questions- as all of the others you've answered- are confidential.

**PART 3: PERSONAL INFORMATION ABOUT YOUR PURCHASES OF ATHLETIC FOOTWEAR PRODUCTS**

For each of the following statements, which describe your personality in relation to your purchases of athletic footwear products, please rate your agreement or disagreement with each by ticking (X) in the appropriate box using the following scale. There are no right or wrong answers to these questions. Just give your opinion.

- 1= strongly disagree
- 2= disagree
- 3= Neutral
- 4= agree
- 5= strongly agree

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.1. When buying a pair of athletic footwear, I rely heavily on the lowest priced one.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.2. For athletic footwear products, I would be better able than most people to tell someone where to shop for discounted athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.3. It bothers me if my friends or my family disapprove of my purchase of athletic footwear products.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.4. I do get bored from the use of the same athletic footwear brands over and over again.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.5. I think that deliberate thinking is necessary for buying a pair of athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.6. Discounting programs play a big part in my purchase decisions when buying a pair of athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.7. My most favorite brand of athletic footwear is.....(please specify brand)					
3.8. When buying a pair of athletic footwear, I will try to maximize the quality I get for the money I spend.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.9. People think of me as a good source of information of discounting programs of athletic footwear products.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.10 I am often the first person in my friends or my family to purchase a new athletic footwear model.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.11. I will willingly spend extra time to find the lowest priced athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.12. I will buy other lower priced athletic footwear than the higher priced one, but the lower priced athletic footwear must meet certain quality requirements.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.13. My purchase decisions in relation to athletic footwear products depend on how my friends or my family wish me to behave.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.14. I will buy different athletic footwear brands to reduce my boredom.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.15. I am more likely to buy a pair of athletic footwear that is on sale.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.16. I will buy only my most favorite brand of athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.17. My friends or my family think that they would be embarrassed to buy a pair of the seasonally discounted Reebok athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.18. I like helping people by providing them with information of discounting programs of athletic footwear products.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.19. I compare prices in order to find the lowest priced athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.20. When buying a pair of athletic footwear, I will give up high quality for a lower price.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.21. When buying a pair of athletic footwear, I do require much thought.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.22. I think that the higher the price of athletic footwear, the higher the quality.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.23. When I buy a pair of athletic footwear that is on sale, I feel that I am getting a good deal.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.24. Purchasing some different athletic footwear brands from time to time makes me feel better.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.25 I am interested in the information about new models of athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.26. It is important to me to fit in with what my friends or my family think about a purchase of athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.27. I find it especially satisfying to have a deliberate thought when buying a pair of athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.28. My friends or my family think that purchasing a pair of the seasonally discounted Reebok athletic footwear would damage their self-image.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.29. I am willing to pay a bit more for the best quality athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.30. When buying a pair of athletic footwear, it is necessary for me to think about the low price and the quality at the same time.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.31. Buying a pair of discounted athletic footwear makes me feel good.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.32. If my most favorite brand of athletic footwear is not available at a shopping outlet, I will choose another athletic footwear brand.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.33. My friends or my family think that it is smart to buy a pair of the seasonally discounted Reebok athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.34. I believe that a price of athletic footwear products is a good indicator of product quality.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.35. I am concerned about how my friends or my family make judgments about me by the athletic footwear that I buy.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.36. My friends or my family think that they like to buy a pair of the seasonally discounted Reebok athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.37. When buying a pair of athletic footwear, I pay more attention to new athletic footwear models than the current ones.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.38. When buying a pair of athletic footwear, it is necessary for me to buy the lowest priced athletic footwear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.39. When buying a pair of athletic footwear, I will ensure that I get the best value from the money I spend.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.40. I buy different athletic footwear brands to get some variety.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.41. I am an expert when it comes to suggesting place to shop for discounted athletic footwear products.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.42. If my most favorite brand of athletic footwear is not available at a shopping outlet, I will search for it at other outlets	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5



Now just a few more questions so that this questionnaire will be completed.

**PART 4: DEMOGRAPHIC DETAILS** (Classification section)

Please tick (X) on the box most relevant to your answers

4.1. Your gender (Please tick only one box)

- (1) Male
- (2) Female

4.2. Your age (Years) (Please tick only one box)

- (1) Under 11 Yrs
- (2) 11-20 Yrs
- (3) 21-30 Yrs
- (4) 31-40 Yrs
- (5) 41-50 Yrs
- (6) 51 Years and up

4.3. Your education (Please tick only one box)

- (1) Lower than secondary school
- (2) Secondary school or equivalent
- (3) College or equivalent
- (4) Bachelor degree
- (5) Master degree
- (6) Doctoral degree
- (7) Other (please specify).....

4.4. Your employment status (Please tick only one box)

- (1) Student (skip to question 4.6)
- (2) Unemployed (skip to question 4.6)
- (3) Part time employed
- (4) Fulltime employed
- (5) Self-employed and without your own employees (skip to question 4.6)
- (6) Self-employed and with your own employees
- (7) Homemaker (skip to question 4.6)
- (8) Retired (skip to question 4.6)

4.5. In the organization or business unit that you work with, your position is (Please tick only one box)

- (1) Top management
- (2) Middle management
- (3) Junior management
- (4) Non-management

4.6. Your marital status *(Please tick only one box)*

- (1) Single
- (2) Married
- (3) Divorced or separated
- (4) Widow or widower

4.7. Number of members in your family

\_\_\_\_\_ Persons.

4.8. Your monthly family income *(Please tick only one box)*

- (1) Less than 10,000 Baht
- (2) 10,000- 30,000 Baht
- (3) 30,001- 50,000 Baht
- (4) 50,001- 70,000 Baht
- (5) 70,001- 90,000 Baht
- (6) Over 90,000 Baht

.....  
(Please complete the information required on the back page to receive a free pair of Soft Liner athletic socks)



## Appendix 5.1

### Chi-square test for the representativeness of the sample on gender, marital status, and education

Gender	Observed number	Expected number	Residual
Male	307	321	-14
Female	234	220	14
Total	541		
Chi-square	1.532		
df	1		
Asymp. Sig. (p value)	0.216		

Marital status	Observed number	Expected number	Residual
Single	277	318	-41
Married	246	223	23
Divorced or separated	18	0	18
Total	541		
Chi-square	1537.137		
df	2		
Asymp. Sig. (p value)	0.000		

Education	Observed number	Expected number	Residual
Lower than secondary school	13	25	-12
Secondary school	115	61	54
College	52	57	-5
Bachelor degree	288	338	-50
Master degree	68	55	13
Doctoral degree	4	4	0
Total	540		
Chi-square	65.835		
df	5		
Asymp. Sig. (p value)	0.000		

Source: Developed for this thesis and the analysis of survey data

## Appendix 5.2

### Comparisons between early and late responses on gender, age, education, employment status, managerial position, marital status, and monthly family income

<b>Gender</b>		<b>Early respondents</b>	<b>Late respondents</b>	<b>Total</b>
Male	Count	192	115	307
	% within group	55.2%	59.6%	56.7%
Female	Count	156	78	234
	% within group	44.8%	40.4%	43.3%
Total	Count	348	193	541
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value		0.985		
Degree of freedom		1		
2 tailed p		0.321		
<b>Age</b>		<b>Early respondents</b>	<b>Late respondents</b>	<b>Total</b>
11-20 Yr	Count	41	21	62
	% within group	11.8%	10.9%	11.5%
21-30 Yr	Count	93	54	147
	% within group	26.7%	28.0%	27.2%
31-40 Yr	Count	126	63	189
	% within group	36.2%	32.6%	34.9%
41-50 Yr	Count	69	40	109
	% within group	19.8%	20.7%	20.1%
51 Yr and above	Count	19	15	34
	% within group	5.5%	7.8%	6.3%
Total	Count	348	193	541
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value		1.717		
Degree of freedom		4		
2 tailed p		0.788		
<b>Education</b>		<b>Early respondents</b>	<b>Late respondents</b>	<b>Total</b>
Lower than secondary school	Count	7	6	13
	% within group	2.0%	3.1%	2.4%
Secondary school	Count	74	41	115
	% within group	21.3%	21.4%	21.3%
College	Count	34	18	52
	% within group	9.8%	9.4%	9.6%
Bachelor degree	Count	181	107	288
	% within group	52.0%	55.7%	53.3%
Master degree	Count	49	19	68
	% within group	14.1%	9.9%	12.6%
Doctoral degree	Count	3	1	4
	% within group	0.9%	0.5%	0.7%
Total	Count	348	192	540
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value		2.894		
Degree of freedom		5		
2 tailed p		0.716		

## Appendix 5.2 continued

<b>Employment status</b>		<b>Early respondents</b>	<b>Late respondents</b>	<b>Total</b>
Student	Count	61	31	92
	% within group	18.0%	16.8%	17.6%
Unemployed	Count	2	0	2
	% within group	0.6%	0.0%	0.4%
Part-time employed	Count	4	5	9
	% within group	1.2%	2.7%	1.7%
Full-time employed	Count	159	90	249
	% within group	46.9%	48.6%	47.5%
Self employed without employees	Count	32	7	39
	% within group	9.4%	3.8%	7.4%
Self employed with employees	Count	69	41	110
	% within group	20.4%	22.2%	21.0%
Homemaker	Count	9	6	15
	% within group	2.7%	3.2%	2.9%
Retired	Count	3	5	8
	% within group	0.9%	2.7%	1.5%
Total	Count	339	185	524
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value	10.954			
Degree of freedom	7			
2 tailed p	0.141			
<b>Managerial position</b>		<b>Early respondents</b>	<b>Late respondents</b>	<b>Total</b>
Top management	Count	59	35	94
	% within group	24.1%	24.3%	24.2%
Middle management	Count	67	31	98
	% within group	27.3%	21.5%	25.2%
Junior management	Count	46	36	82
	% within group	18.8%	25.0%	21.1%
Non management	Count	73	42	115
	% within group	29.8%	29.2%	29.6%
Total	Count	245	144	389
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value	2.900			
Degree of freedom	3			
2 tailed p	0.407			
<b>Marital status</b>		<b>Early respondents</b>	<b>Late respondents</b>	<b>Total</b>
Single	Count	191	86	277
	% within group	54.9%	44.6%	51.2%
Married	Count	145	101	246
	% within group	41.7%	52.3%	45.5%
Divorced or separated	Count	11	6	17
	% within group	3.2%	3.1%	3.1%
Widow or widower	Count	1	0	1
	% within group	0.3%	0.0%	0.2%
Total	Count	348	193	541
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value	6.246			
Degree of freedom	3			
2 tailed p	0.100			

## Appendix 5.2 continued

Monthly family income		Early respondents	Late respondents	Total
Less than 10,000 Baht	Count	14	16	30
	% within group	4.1%	8.3%	5.6%
10,000-30,000 Baht	Count	101	58	159
	% within group	29.4%	30.2%	29.7%
30,001-50,000 Baht	Count	75	48	123
	% within group	21.8%	25.0%	22.9%
50,001-70,000 Baht	Count	50	21	71
	% within group	14.5%	10.9%	13.2%
70,001-90,000 Baht	Count	25	9	34
	% within group	7.3%	4.7%	6.3%
Over 90,000 Baht	Count	79	40	119
	% within group	23.0%	20.8%	22.2%
Total	Count	344	192	536
	% within group	100.0%	100.0%	100.0%
Pearson-Chi square value	7.300			
Degree of freedom	5			
2 tailed p	0.197			

Source: Analysis of survey data

### Appendix 5.3

#### Comparisons of mean ranks between early and late responses on family size, and psychographic variables

Variables	Group	N	Mean Rank	Sum of Ranks	Z score	2 tailed P
Family size	Early respondents	342	263.93	90262.50	-0.730	0.466
	Late respondents	192	273.87	52582.50		
	Total	534				
Price consciousness	Early respondents	338	255.21	86260.00	-1.773	0.076
	Late respondents	189	279.72	52868.00		
	Total	527				
Value consciousness	Early respondents	338	258.73	87451.00	-1.062	0.288
	Late respondents	189	273.42	51677.00		
	Total	527				
Quality consciousness	Early respondents	338	265.90	89874.00	-0.383	0.702
	Late respondents	189	260.60	49254.00		
	Total	527				
Market (price) mavenism	Early respondents	338	258.01	87208.00	-1.207	0.227
	Late respondents	189	274.71	51920.00		
	Total	527				
Loyalty to other athletic footwear brands	Early respondents	338	259.34	87657.00	-0.939	0.348
	Late respondents	189	272.33	51471.00		
	Total	527				
Variety seeking	Early respondents	338	262.69	88788.00	-0.265	0.791
	Late respondents	189	266.35	50340.00		
	Total	527				
Need for cognition	Early respondents	338	253.81	85788.00	-2.054	0.040*
	Late respondents	189	282.22	53340.00		
	Total	527				
Innovativeness	Early respondents	338	259.88	87840.00	-0.830	0.406
	Late respondents	189	271.37	51288.00		
	Total	527				
Deal proneness	Early respondents	338	264.45	89384.00	-0.091	0.928
	Late respondents	189	263.20	49744.00		
	Total	527				
Motivation to conform to expectations of reference groups	Early respondents	338	258.67	87430.00	-1.075	0.282
	Late respondents	189	273.53	51698.00		
	Total	527				
Attitudes of reference groups towards the seasonally discounted Reebok athletic footwear	Early respondents	338	260.81	88152.99	-0.644	0.520
	Late respondents	189	269.71	50975.00		
	Total	527				

\* significant at  $p \leq 0.05$

Source: Analysis of survey data

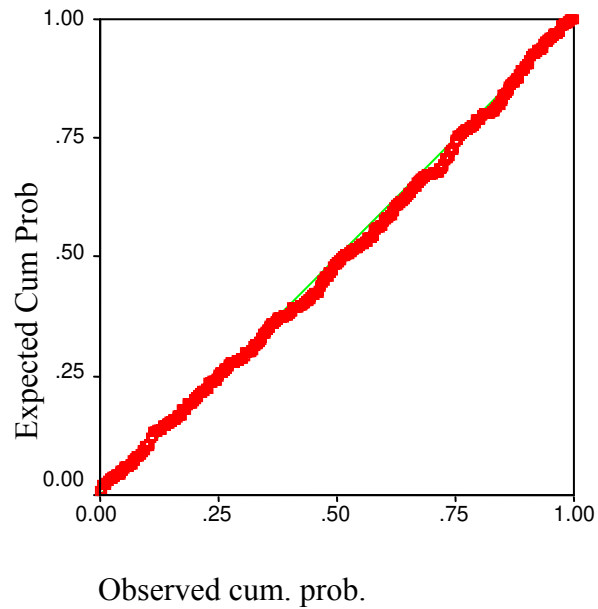


## Appendix 5.4

### Normal probability plot and residual plot for hypotheses 1A, 1B, and 1C

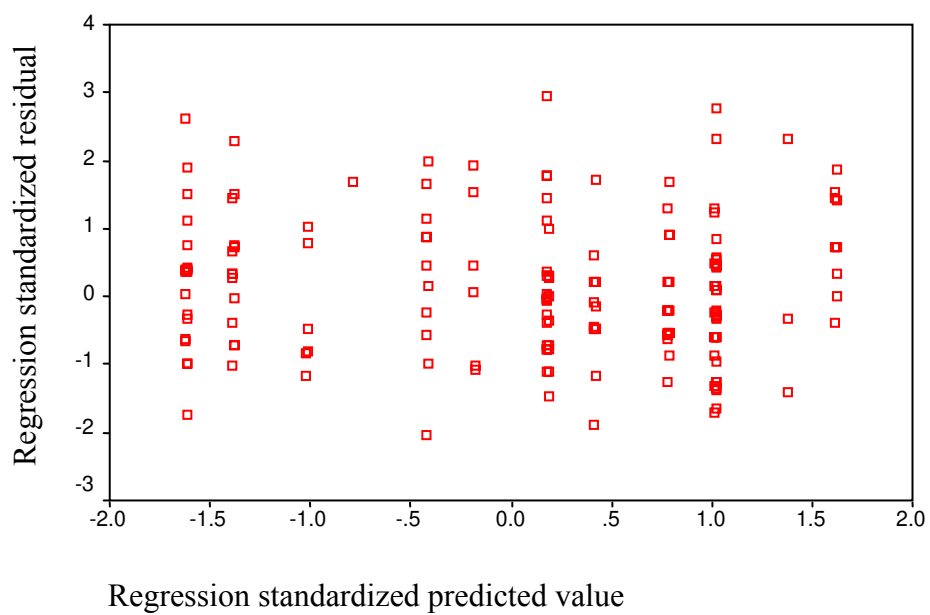
#### Normal probability plot of standardized residual

Dependent Variable: Factor score of price consciousness



#### Residual plot

Dependent Variable: factor score of price consciousness

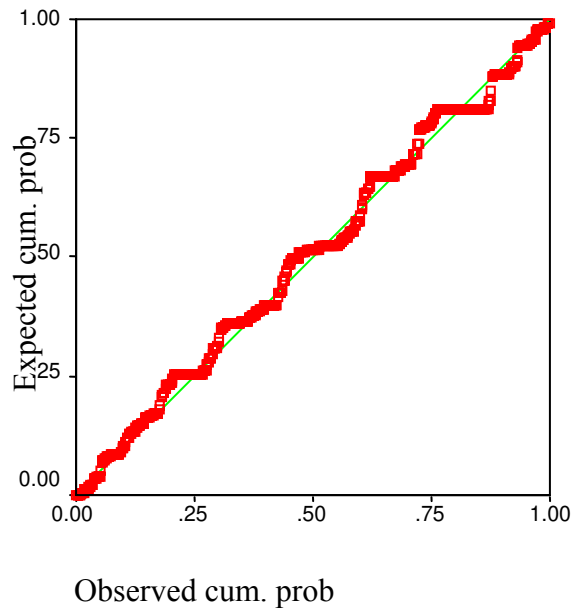


## Appendix 5.5

### Normal probability plot and residual plot for hypothesis 2

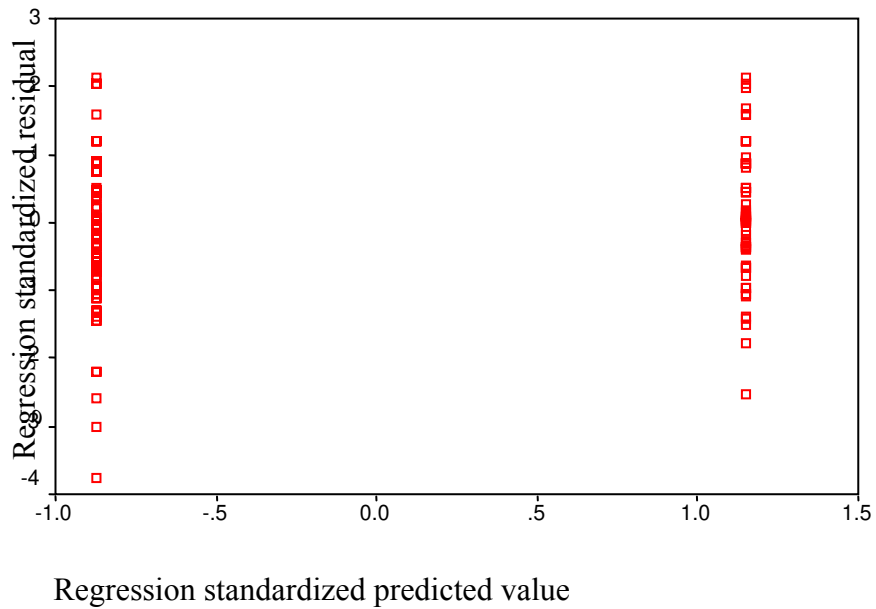
#### Normal probability plot of standardized residual

Dependent Variable: factor score of deal proneness



#### Residual plot

Dependent Variable: factor score of deal proneness

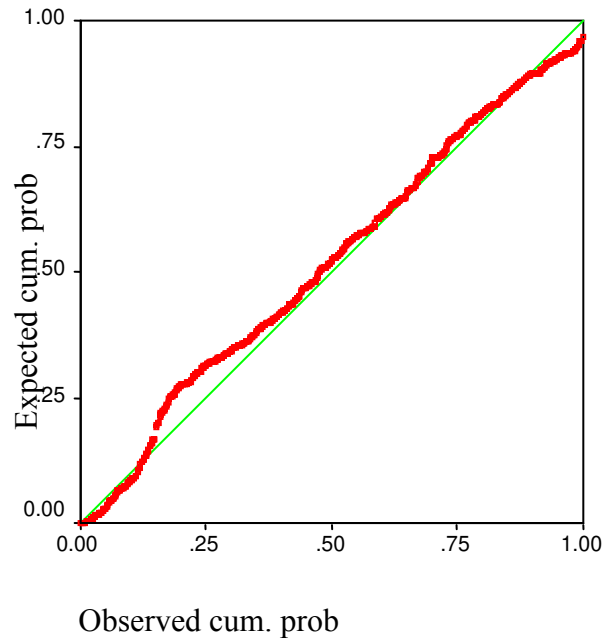


## Appendix 5.6

### Normal probability plot and residual plot for hypothesis 3

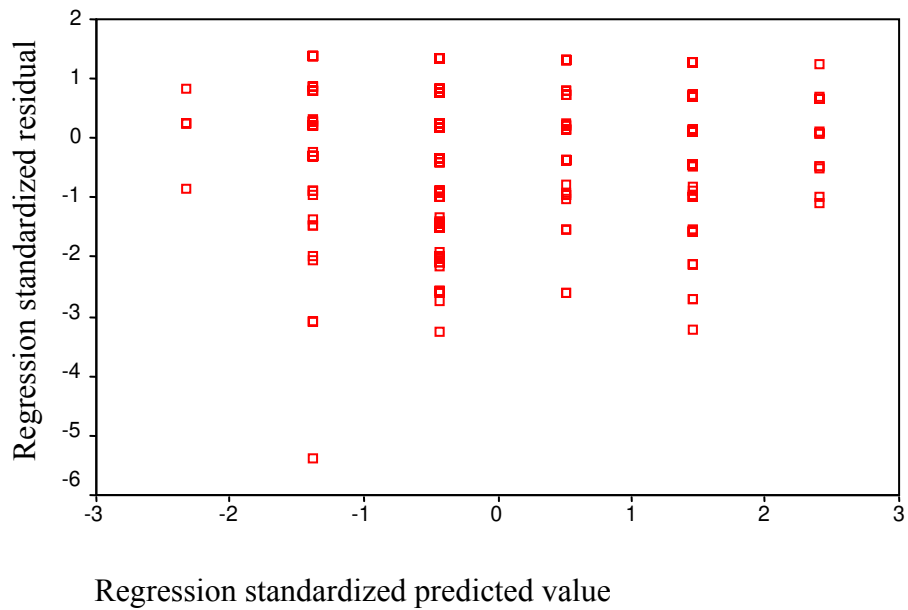
#### Normal probability plot of standardized residual

Dependent Variable: factor score of need for cognition



#### Residual plot

Dependent Variable: factor score of need for cognition

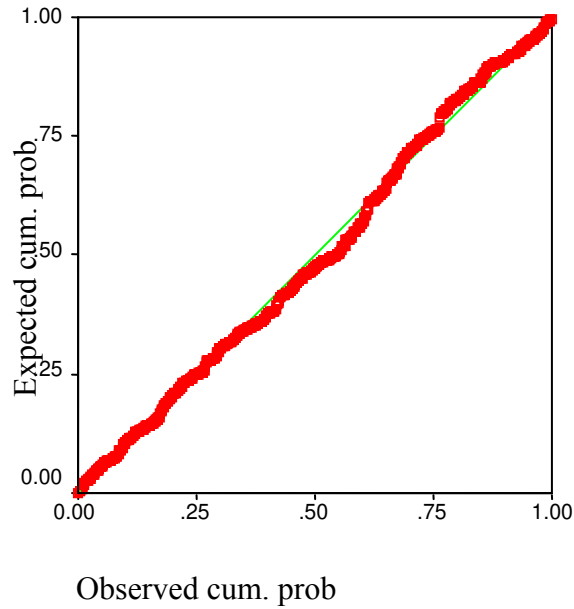


## Appendix 5.7

### Normal probability plot and residual plot for hypothesis 4

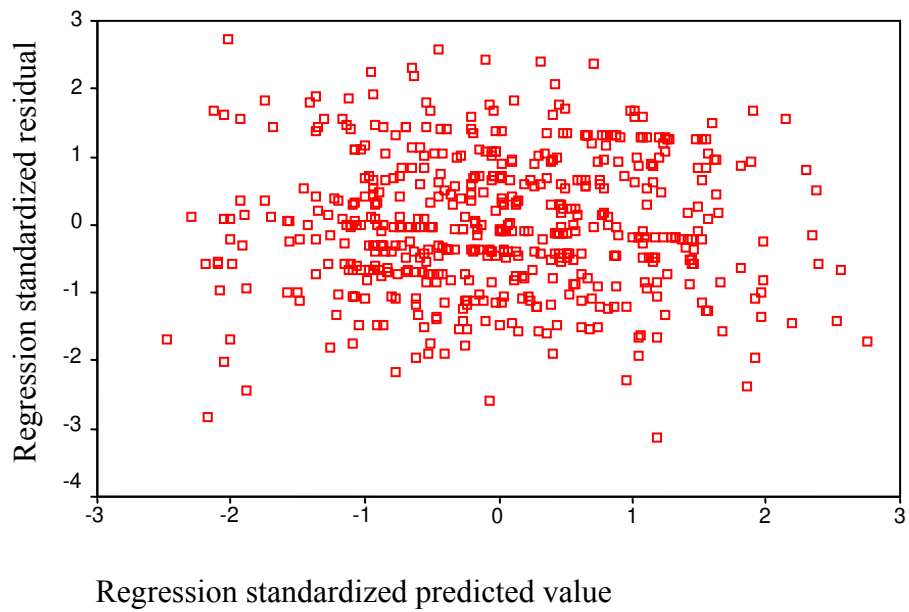
#### Normal probability plot of standardized residual

Dependent Variable: factor score of variety seeking



#### Residual plot

Dependent Variable: factor score of variety seeking

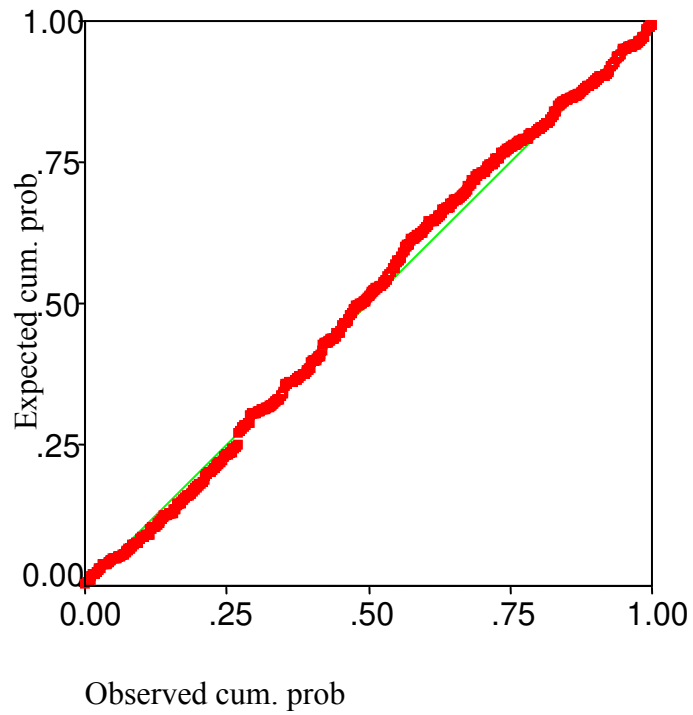


## Appendix 5.8

### Normal probability plot and residual plot for hypothesis 5

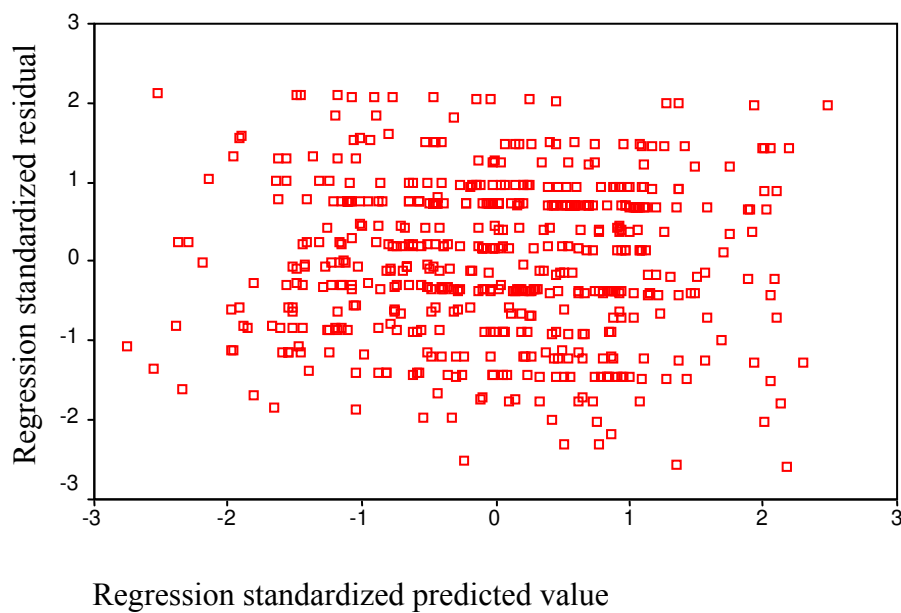
#### Normal probability plot of standardized residual

Dependent Variable: factor score of quality consciousness



#### Residual plot

Dependent Variable: factor score of quality consciousness

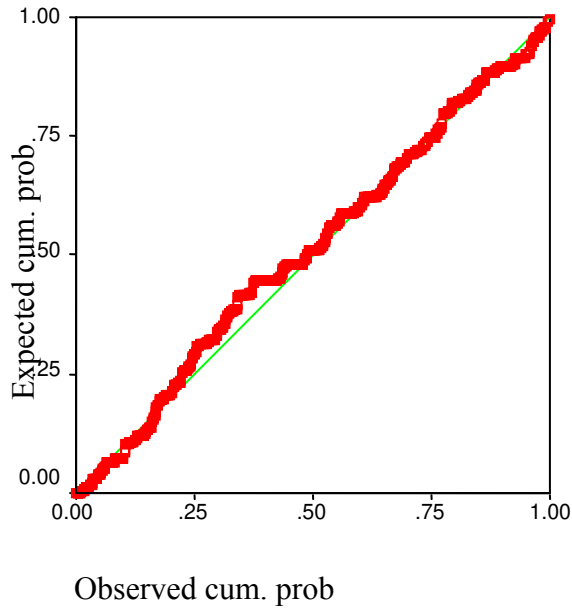


## Appendix 5.9

### Normal probability plot and residual plot for hypothesis 6

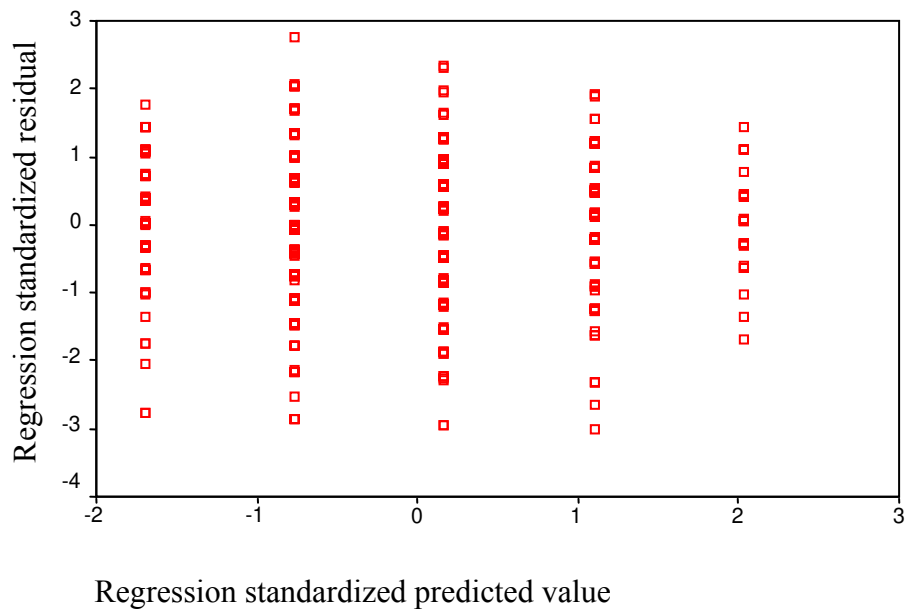
#### Normal probability plot of standardized residual

Dependent Variable: factor score of market (price) mavenism



#### Residual plot

Dependent Variable: factor score of market (price) mavenism

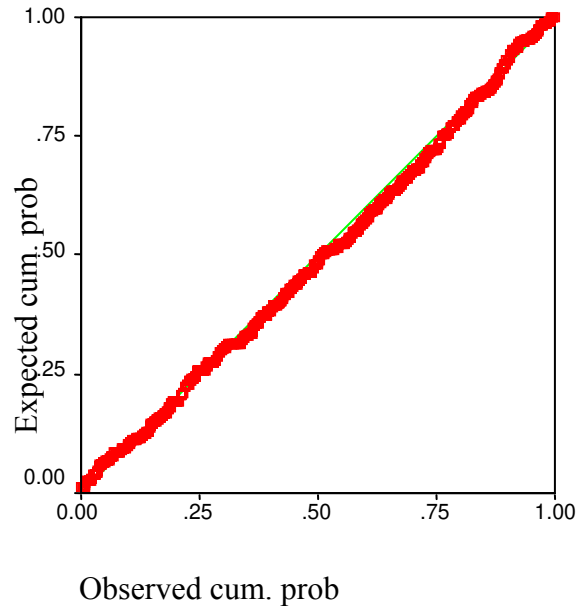


## Appendix 5.10

### Normal probability plot and residual plot for hypotheses 7A and 7B

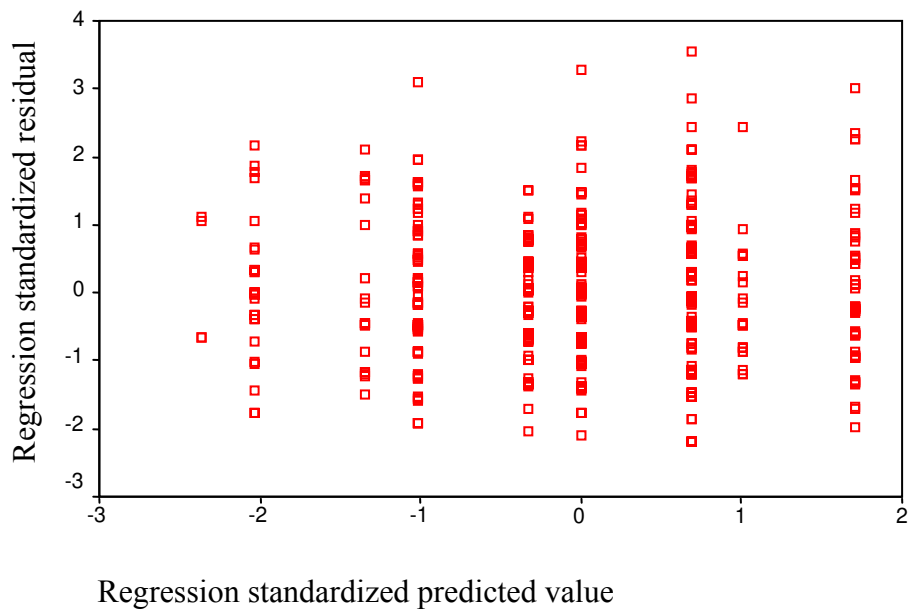
#### Normal probability plot of standardized residual

Dependent Variable: factor score of value consciousness



#### Residual plot

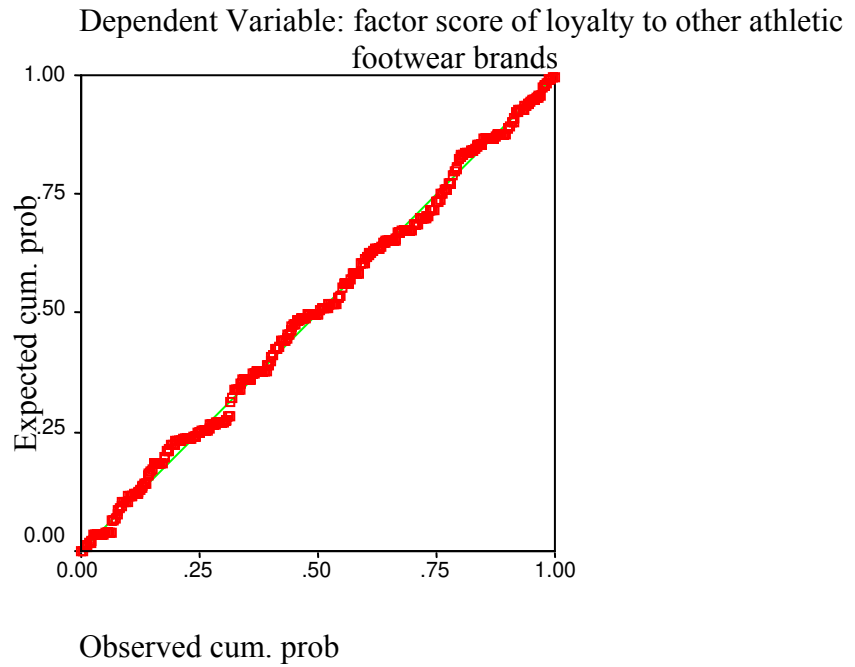
Dependent Variable: factor score of value consciousness



## Appendix 5.11

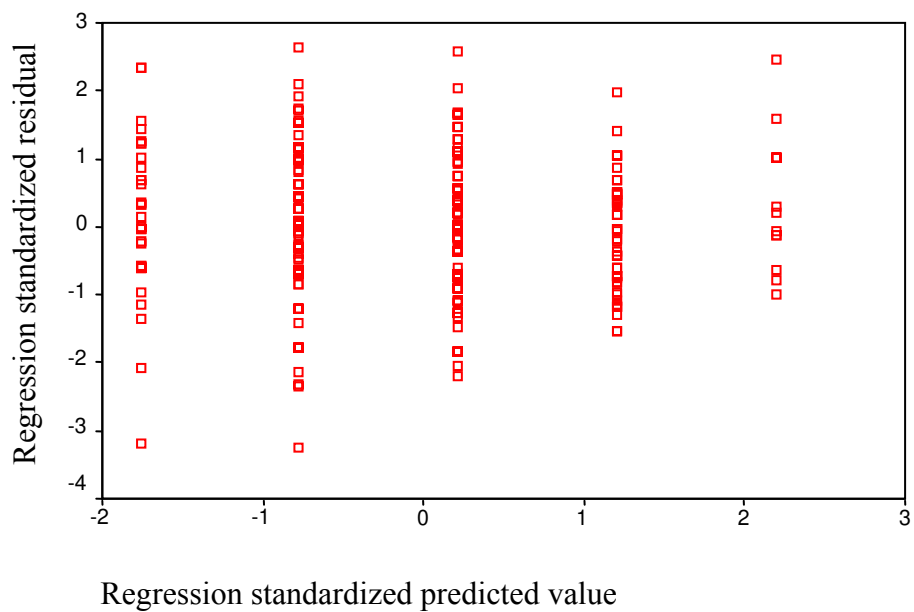
### Normal probability plot and residual plot for hypothesis 8

#### Normal probability plot of standardized residual



#### Residual plot

Dependent Variable: factor score of loyalty to other athletic footwear brands



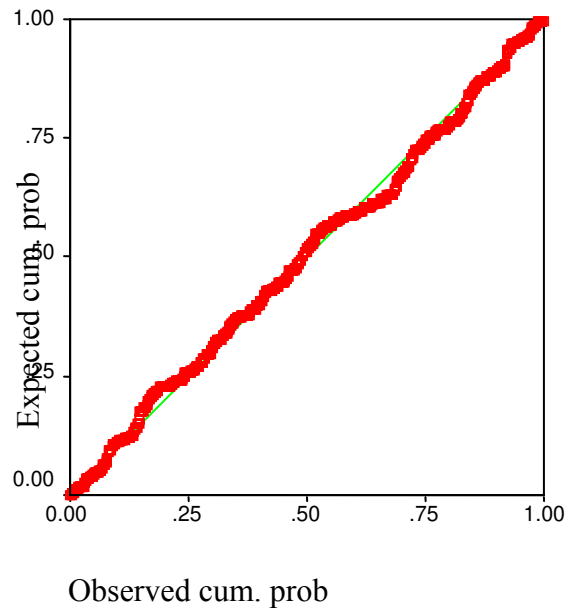


## Appendix 5.12

### Normal probability plot and residual plot for hypotheses 9A and 9B

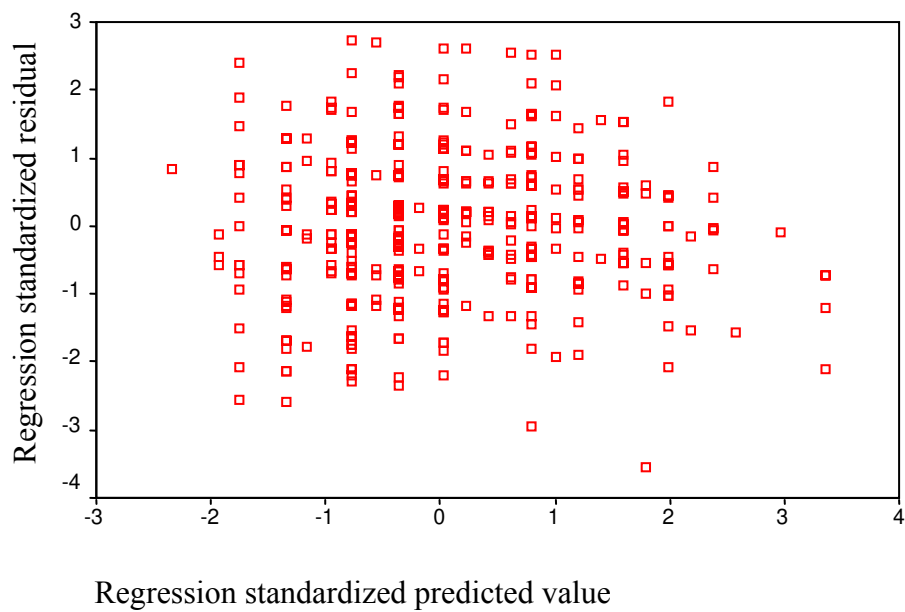
#### Normal probability plot of standardized residual

Dependent Variable: factor score of innovativeness



#### Residual plot

Dependent Variable: factor score of innovativeness

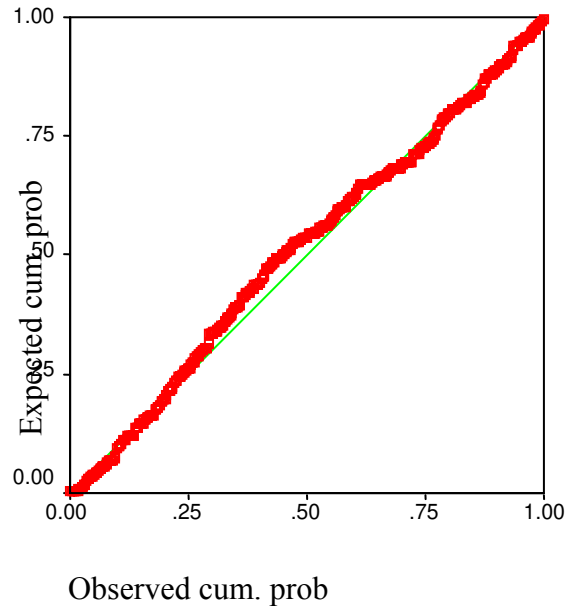


### Appendix 5.13

#### Normal probability plot and residual plot for hypotheses 10A, 10B and 10C

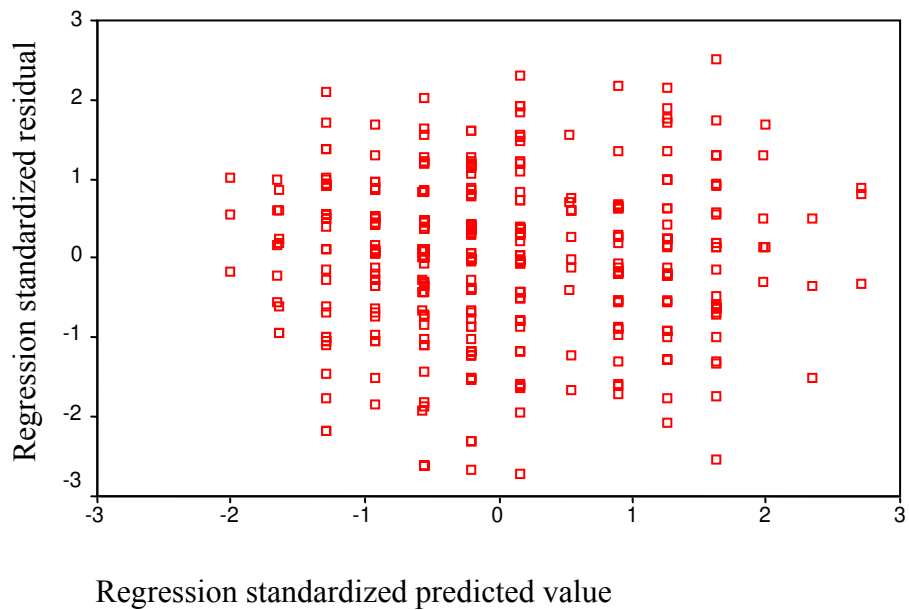
##### Normal probability plot of standardized residual

Dependent Variable: factor score of 'motivation to conform'



##### Residual plot

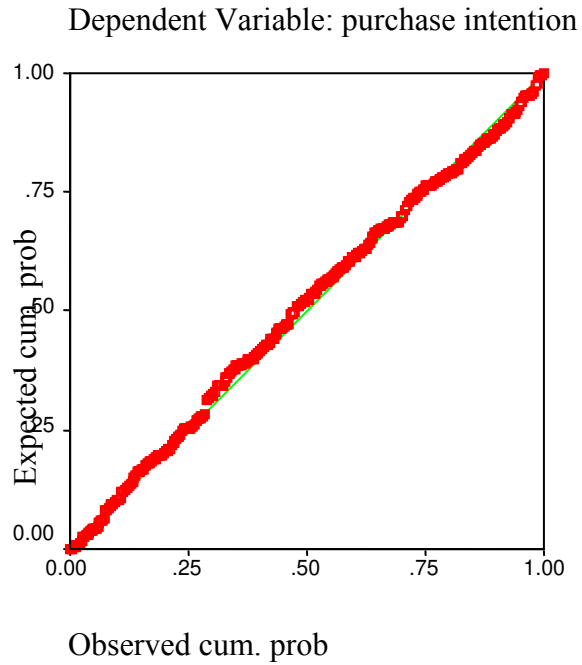
Dependent Variable: factor score of 'motivation to conform'



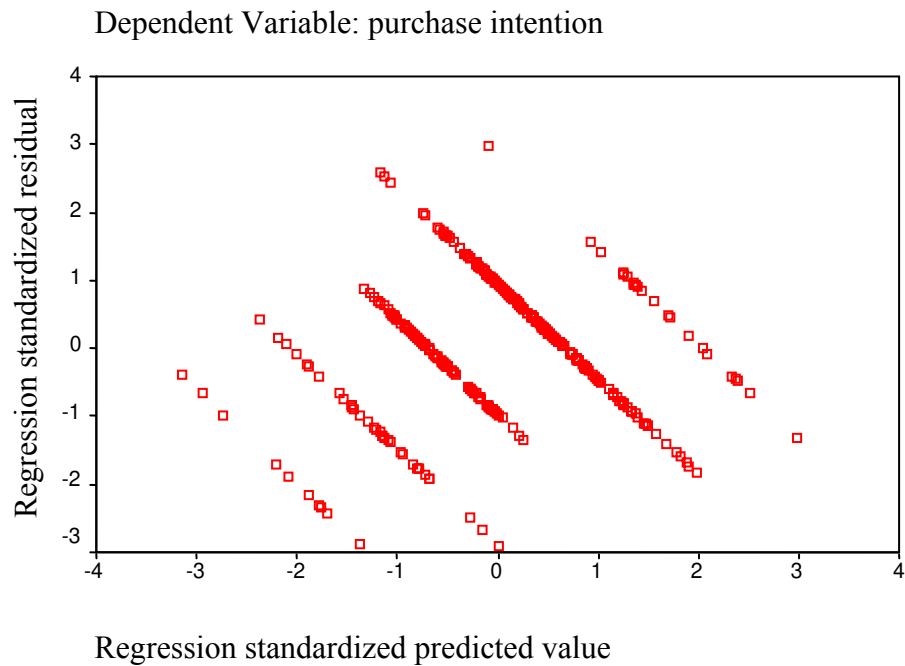
## Appendix 5.14

### Normal probability plot and residual plot for hypotheses 11A to 11K

#### Normal probability plot of standardized residual



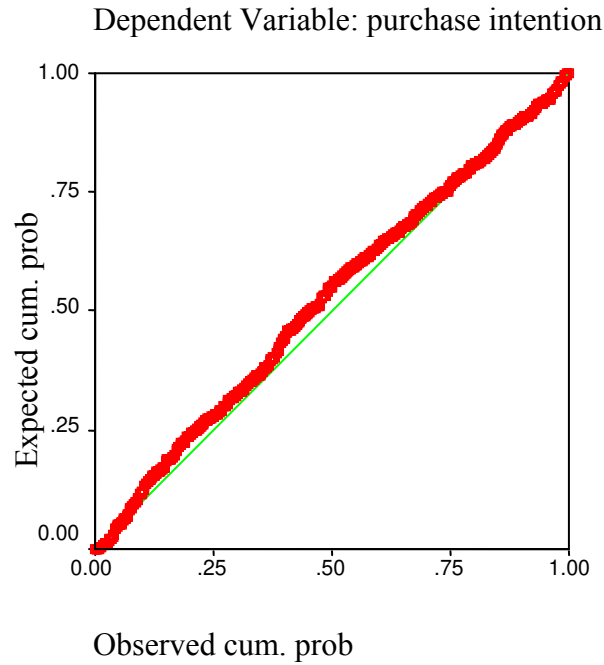
#### Residual plot



## Appendix 5.15

### Normal probability plot and residual plot for hypothesis 12

#### Normal probability plot of standardized residual



#### Residual plot

